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Maximum Length Sequence corresponding to clone ID 101665

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 1
  - Ceres seq id 1481332
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 2
    - Ceres seq id 1481333
    - Location of start within SEQ ID NO 1: at 203 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 107900

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 3
  - Ceres seq id 1481342
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 4
    - Ceres seq\_id 1481343
    - Location of start within SEQ ID NO 3: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 5
    - Ceres seq id 1481344
    - Location of start within SEQ ID NO 3: at 50 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 6
    - Ceres seq id 1481345
    - Location of start within SEQ ID NO 3: at 518 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 7
  - Ceres seq\_id 1481346
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 8
    - Ceres seq\_id 1481347
    - Location of start within SEQ ID NO 7: at 629 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 9

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- Ceres seq id 1481348
- Location of start within SEQ ID NO 7: at 779 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 10
    - Ceres seq\_id 1481349
    - Location of start within SEQ ID NO 7: at 828 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 109446

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 11
  - Ceres seq id 1481357
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 12
    - Ceres seq id 1481358
    - Location of start within SEQ ID NO 11: at 342 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 13
    - Ceres seq\_id 1481359
    - Location of start within SEQ ID NO 11: at 387 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 14
    - Ceres seq\_id 1481360
    - Location of start within SEQ ID NO 11: at 396 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 15
  - Ceres seq\_id 1481372
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 16
    - Ceres seq\_id 1481373
    - Location of start within SEQ ID NO 15: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 17
  - Ceres seq id 1481374
  - Location of start within SEQ ID NO 15: at 44 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 18
    - Ceres seq id 1481375
    - Location of start within SEQ ID NO 15: at 348 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 115279

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 19
  - Ceres seq\_id 1481388
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 20
    - Ceres seq\_id 1481389
    - Location of start within SEQ ID NO 19: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 21
    - Ceres seq\_id 1481390
    - Location of start within SEQ ID NO 19: at 9 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 22
    - Ceres seq id 1481391
    - Location of start within SEQ ID NO 19: at 63 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 23
  - Ceres seq\_id 1481423
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 24
    - Ceres seq id 1481424
    - Location of start within SEQ ID NO 23: at 1 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 25
    - Ceres seq id 1481425
    - Location of start within SEQ ID NO 23: at 75 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 125028

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 26
  - Ceres seq\_id 1481471
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 27
    - Ceres seq\_id 1481472
    - Location of start within SEQ ID NO 26: at 106 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 28
    - Ceres seq id 1481473
    - Location of start within SEQ ID NO 26: at 169 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 29
    - Ceres seq id 1481474
    - Location of start within SEQ ID NO 26: at 190 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 30
  - Ceres seq\_id 1481479
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 31
    - Ceres seq\_id 1481480
    - Location of start within SEQ ID NO 30: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 32

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- Ceres seg id 1481481
- Location of start within SEQ ID NO 30: at 114 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 33
    - Ceres seq id 1481482
    - Location of start within SEQ ID NO 30: at 297 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 12613

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 34
  - Ceres seq\_id 1481483
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 35
    - Ceres seg id 1481484
    - Location of start within SEQ ID NO 34: at 184 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 36
    - Ceres seq id 1481485
    - Location of start within SEQ ID NO 34: at 268 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 37
    - Ceres seq id 1481486
    - Location  $\bar{\text{of}}$  start within SEQ ID NO 34: at 283 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 38
  - Ceres seq\_id 1481487
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 39
    - Ceres seq\_id 1481488
    - Location of start within SEQ ID NO 38: at 124 nt.
- - (D) Related Amino Acid Sequences

(B) Polypeptide Sequence

- Pat. Appln. SEQ ID NO 40
- Ceres seq\_id 1481489
- Location of start within SEQ ID NO 38: at 133 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 41
    - Ceres seq\_id 1481490
    - Location of start within SEQ ID NO 38: at 145 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 1367

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 42
  - Ceres seq\_id 1481491
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 43
    - Ceres seq\_id 1481492
    - Location of start within SEQ ID NO 42: at 49 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 44
  - Ceres seq\_id 1481504
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 45
    - Ceres seq\_id 1481505
    - Location of start within SEQ ID NO 44: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 46
    - Ceres seq\_id 1481506
    - Location of start within SEQ ID NO 44: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 47
    - Ceres seq id 1481507
    - Location of start within SEQ ID NO 44: at 41 nt.

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- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 147980

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 48
  - Ceres seq\_id 1481516
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 49
    - Ceres seq id 1481517
    - Location of start within SEQ ID NO 48: at 90 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 50
    - Ceres seq id 1481518
    - Location of start within SEQ ID NO 48: at 186 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 51
    - Ceres seg id 1481519
    - Location of start within SEQ ID NO 48: at 348 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 52
  - Ceres seq id 1481520
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 53
    - Ceres seq id 1481521
    - Location of start within SEQ ID NO 52: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 54
    - Ceres seq\_id 1481522
    - Location of start within SEQ ID NO 52: at 68 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 55

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- Ceres seg id 1481523
- Location of start within SEQ ID NO 52: at 170 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 148070

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 56
  - Ceres seg id 1481524
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 57
    - Ceres seq\_id 1481525
    - Location of start within SEQ ID NO 56: at 448 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 58
    - Ceres seq id 1481526
    - Location of start within SEQ ID NO 56: at 1241 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 59
    - Ceres seq\_id 1481527
    - Location of start within SEQ ID NO 56: at 1403 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 60
  - Ceres seq id 1481532
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 61
    - Ceres seq\_id 1481533
    - Location of start within SEQ ID NO 60: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 62
    - Ceres seq\_id 1481534
    - Location of start within SEQ ID NO 60: at 108 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 63
  - Ceres seq id 1481535
  - Location of start within SEQ ID NO 60: at 153 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 148887

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 64
  - Ceres seq id 1481540
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 65
    - Ceres seq id 1481541
    - Location of start within SEQ ID NO 64: at 163 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 66
    - Ceres seq\_id 1481542
    - Location of start within SEQ ID NO 64: at 220 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 67
    - Ceres seq\_id 1481543
    - Location of start within SEQ ID NO 64: at 238 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 68
  - Ceres seq\_id 1481544
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 69
    - Ceres seq\_id 1481545
    - Location of start within SEQ ID NO 68: at 124 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 70
    - Ceres seq\_id 1481546
    - Location of start within SEQ ID NO 68: at 178 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 71
    - Ceres seq id 1481547
    - Location of start within SEQ ID NO 68: at 280 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 150293

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 72
  - Ceres seq\_id 1481564
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 73
    - Ceres seq\_id 1481565
    - Location of start within SEQ ID NO 72: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 74
    - Ceres seq\_id 1481566
    - Location of start within SEQ ID NO 72: at 60 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 75
    - Ceres seq\_id 1481567
    - Location of start within SEQ ID NO 72: at 69 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 76
  - Ceres seq\_id 1481580
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 77
    - Ceres seq\_id 1481581
    - Location of start within SEQ ID NO 76: at 594 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 78

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- Ceres seq id 1481582
- Location of start within SEQ ID NO 76: at 630 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 79
    - Ceres seq id 1481583
    - Location of start within SEQ ID NO 76: at 768 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 151413

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 80
  - Ceres seq id 1481596
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 81
    - Ceres seq id 1481597
    - Location of start within SEQ ID NO 80: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 82
    - Ceres seq id 1481598
    - Location of start within SEQ ID NO 80: at 87 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 83
    - Ceres seq id 1481599
    - Location of start within SEQ ID NO 80: at 114 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 84
  - Ceres seq id 1481613
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 85
    - Ceres seq\_id 1481614
    - Location of start within SEQ ID NO 84: at 403 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 86
  - Ceres seq id 1481615
  - Location of start within SEQ ID NO 84: at 562 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 87
    - Ceres seq\_id 1481616
    - Location of start within SEQ ID NO 84: at 616 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 153154

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 88
  - Ceres seq id 1481621
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 89
    - Ceres seq id 1481622
    - Location of start within SEQ ID NO 88: at 180 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 90
    - Ceres seq\_id 1481623
    - Location of start within SEQ ID NO 88: at 291 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 91
    - Ceres seq\_id 1481624
    - Location of start within SEQ ID NO 88: at 345 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 92
  - Ceres seq id 1481625
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 93
    - Ceres seq\_id 1481626
    - Location of start within SEQ ID NO 92: at 1 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 94
    - Ceres seq id 1481627
    - Location of start within SEQ ID NO 92: at 88 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous} \begin{tabular}{ll} \begin{ta$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 95
    - Ceres seq\_id 1481628
    - Location of start within SEQ ID NO 92: at 499 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 155661

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 96
  - Ceres seq\_id 1481632
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 97
    - Ceres seq id 1481633
    - Location of start within SEQ ID NO 96: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 98
    - Ceres seq\_id 1481634
    - Location of start within SEQ ID NO 96: at 9 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 99
  - Ceres seq id 1481635
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 100
    - Ceres seq\_id 1481636
    - Location of start within SEQ ID NO 99: at 152 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 101

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- Ceres seq id 1481637
- Location of start within SEQ ID NO 99: at 409 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 102
    - Ceres seq id 1481638
    - Location of start within SEQ ID NO 99: at 457 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 155707

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 103 Ceres seq id 1481639
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 104
    - Ceres seq id 1481640
    - Location of start within SEQ ID NO 103: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 105
    - Ceres seq id 1481641
    - Location of start within SEQ ID NO 103: at 142 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 106
    - Ceres seq id 1481642
    - Location of start within SEQ ID NO 103: at 712 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 107
  - Ceres seq id 1481647
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 108
    - Ceres seq\_id 1481648
    - Location of start within SEQ ID NO 107: at 156 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 109
  - Ceres seq id 1481649
  - Location of start within SEQ ID NO 107: at 243 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 110
    - Ceres seq id 1481650
    - Location of start within SEQ ID NO 107: at 429 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 1939

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 111
  - Ceres seq id 1481668
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 112
    - Ceres seq\_id 1481669
    - Location of start within SEQ ID NO 111: at 201 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 113
    - Ceres seq id 1481670
    - Location of start within SEQ ID NO 111: at 405 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 114
  - Ceres seq id 1481681
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 115
    - Ceres seq\_id 1481682
    - Location of start within SEQ ID NO 114: at 239 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 116
    - Ceres seq\_id 1481683
    - Location of start within SEQ ID NO 114: at 398 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 218721

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 117
  - Ceres seq\_id 1481700
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 118
    - Ceres seq\_id 1481701
    - Location of start within SEQ ID NO 117: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 119
    - Ceres seq id 1481702
    - Location of start within SEQ ID NO 117: at 268 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 120
    - Ceres seq\_id 1481703
    - Location of start within SEQ ID NO 117: at 292 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 121
  - Ceres seq id 1481704
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 122
    - Ceres seq\_id 1481705
    - Location of start within SEQ ID NO 121: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 123
    - Ceres seq\_id 1481706
    - Location of start within SEQ ID NO 121: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 124

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- Ceres seq id 1481707
- Location of start within SEQ ID NO 121: at 60 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220633

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 125
  - Ceres seq id 1481716
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 126
    - Ceres seq\_id 1481717
    - Location of start within SEQ ID NO 125: at 55 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 127
    - Ceres seq\_id 1481718
    - Location of start within SEQ ID NO 125: at 320 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 128
    - Ceres seq id 1481719
    - Location of start within SEQ ID NO 125: at 395 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 129
  - Ceres seq\_id 1481728
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 130
    - Ceres seq\_id 1481729
    - Location of start within SEQ ID NO 129: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 131
    - Ceres seq id 1481730
    - Location of start within SEQ ID NO 129: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 132
  - Ceres seg id 1481731
  - Location of start within SEQ ID NO 129: at 214 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220829

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 133
  - Ceres seq id 1481732
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 134
    - Ceres seq id 1481733
    - Location of start within SEQ ID NO 133: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 135
    - Ceres seq id 1481734
    - Location of start within SEQ ID NO 133: at 169 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 136
    - Ceres seq\_id 1481735
    - Location of start within SEQ ID NO 133: at 405 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220846 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 137
  - Pat. Appin. Big 10 No
  - Ceres seq\_id 1481740
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 138
    - Ceres seq\_id 1481741
    - Location of start within SEQ ID NO 137: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 139
    - Ceres seq\_id 1481742
    - Location of start within SEQ ID NO 137: at 10 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 140
    - Ceres seg id 1481743
    - Location of start within SEQ ID NO 137: at 22 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220852

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 141
  - Ceres seq id 1481744
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 142
    - Ceres seq id 1481745
    - Location of start within SEQ ID NO 141: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 143
    - Ceres seq id 1481746
    - Location of start within SEQ ID NO 141: at 29 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 144
  - Ceres seq id 1481747
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 145
    - Ceres seq\_id 1481748
    - Location of start within SEQ ID NO 144: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 146
    - Ceres seq id 1481749
    - Location of start within SEQ ID NO 144: at 74 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 147

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- Ceres seq id 1481750
- Location of start within SEQ ID NO 144: at 95 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220915

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 148
  - Ceres seq id 1481755
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 149
    - Ceres seq id 1481756
    - Location of start within SEQ ID NO 148: at 178 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 220934

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 150
  - Ceres seg id 1481764
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 151
    - Ceres seq\_id 1481765
    - Location of start within SEQ ID NO 150: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 152
    - Ceres seq\_id 1481766
    - Location of start within SEQ ID NO 150: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 153
  - Ceres seq id 1481770
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 154
    - Ceres seg id 1481771
    - Location of start within SEQ ID NO 153: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide} \begin{subarray}{ll} \end{subarray}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 155
    - Ceres seq id 1481772
    - Location of start within SEQ ID NO 153: at 96 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 226475

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 156
  - Ceres seg id 1481775
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 157
    - Ceres seq id 1481776
    - Location of start within SEQ ID NO 156: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 158
    - Ceres seq id 1481777
    - Location of start within SEQ ID NO 156: at 68 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 159
    - Ceres seq id 1481778
    - Location of start within SEQ ID NO 156: at 255 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 226483

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 160
  - Ceres seq id 1481779
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 161
    - Ceres seq\_id 1481780
    - Location of start within SEQ ID NO 160: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 162
  - Ceres seq\_id 1481789
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 163
    - Ceres seq\_id 1481790
    - Location of start within SEQ ID NO 162: at 109 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 164
    - Ceres seg id 1481791
    - Location of start within SEQ ID NO 162: at 229 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 226516

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 165
  - Ceres seq\_id 1481792
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 166
    - Ceres seq id 1481793
    - Location of start within SEQ ID NO 165: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 167
    - Ceres seq id 1481794
    - Location of start within SEQ ID NO 165: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 168
    - Ceres seq\_id 1481795
    - Location of start within SEQ ID NO 165: at 67 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 169
  - Ceres seq\_id 1481796
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 170
    - Ceres seq\_id 1481797
    - Location of start within SEQ ID NO 169: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 171

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- Ceres seq\_id 1481798
- Location of start within SEQ ID NO 169: at 118 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 227202

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 172
  - Ceres seq\_id 1481799

Maximum Length Sequence corresponding to clone ID 227468

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 173
  - Ceres seq id 1481800
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 174
    - Ceres seq id 1481801
    - Location of start within SEO ID NO 173: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 175
    - Ceres seg id 1481802
    - Location of start within SEQ ID NO 173: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 176
    - Ceres seq id 1481803
    - Location of start within SEQ ID NO 173: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 177
  - Ceres seq id 1481808
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 178
    - Ceres seq\_id 1481809
    - Location of start within SEQ ID NO 177: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 179
    - Ceres seq id 1481810
    - Location of start within SEQ ID NO 177: at 15 nt.

- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 180
    - Ceres seq id 1481811
    - Location of start within SEQ ID NO 177: at 45 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 227719

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 181
  - Ceres seq\_id 1481815
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 182
    - Ceres seq id 1481816
    - Location of start within SEQ ID NO 181: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 183
    - Ceres seg id 1481817
    - Location of start within SEQ ID NO 181: at 40 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 184
    - Ceres seq\_id 1481818
    - Location of start within SEQ ID NO 181: at 106 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 185
  - Ceres seq\_id 1481819
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 186
    - Ceres seq id 1481820
    - Location of start within SEQ ID NO 185: at 51 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 187
- Ceres seq id 1481821
- Location of start within SEQ ID NO 185: at 57 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 188
    - Ceres seq\_id 1481822
    - Location of start within SEQ ID NO 185: at 66 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 227814

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 189
  - Ceres seg id 1481823
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 190
    - Ceres seq\_id 1481824
    - Location of start within SEQ ID NO 189: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 191
    - Ceres seq\_id 1481825
    - Location of start within SEQ ID NO 189: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 192
    - Ceres seq id 1481826
    - Location of start within SEQ ID NO 189: at 70 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 193
  - Ceres seq id 1481827
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 194
    - Ceres seq\_id 1481828
    - Location of start within SEQ ID NO 193: at 2 nt.

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- (D) Related Amino Acid Sequences
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 195
  - Ceres seq id 1481829
  - Location of start within SEQ ID NO 193: at 167 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 196
    - Ceres seq\_id 1481830
    - Location of start within SEQ ID NO 193: at 215 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 229883 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 197
- Ceres seq id 1481831
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 198
  - Ceres seq\_id 1481832
  - Location of start within SEQ ID NO 197: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 199
    - Ceres seq\_id 1481833
    - Location of start within SEQ ID NO 197: at 69 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 200
    - Ceres seq\_id 1481834
    - Location of start within SEQ ID NO 197: at 96 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 231825 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 201
- Ceres seq\_id 1481839
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 202
  - Ceres seq\_id 1481840
  - Location of start within SEQ ID NO 201: at 1 nt.

- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 203
    - Ceres seq\_id 1481841
    - Location of start within SEQ ID NO 201: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 204
    - Ceres seq id 1481842
    - Location of start within SEQ ID NO 201: at 272 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 232410

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 205
  - Ceres seq\_id 1481847
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 206
    - Ceres seq id 1481848
    - Location of start within SEQ ID NO 205: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 207
    - Ceres seq id 1481849
    - Location of start within SEQ ID NO 205: at 44 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 208
    - Ceres seq\_id 1481850
    - Location of start within SEQ ID NO 205: at 128 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 209
  - Ceres seq id 1481851
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 210
- Ceres seq id 1481852
- Location of start within SEQ ID NO 209: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 211
    - Ceres seq id 1481853
    - Location of start within SEQ ID NO 209: at 62 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 212
    - Ceres seq\_id 1481854
    - Location of start within SEQ ID NO 209: at 122 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 237301 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 213
- Ceres seq\_id 1481859
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 214
  - Ceres seq id 1481860
  - Location of start within SEQ ID NO 213: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 215
    - Ceres seq id 1481861
    - Location of start within SEQ ID NO 213: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 216
    - Ceres seq\_id 1481862
    - Location of start within SEQ ID NO 213: at 5 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 237328

(A) Polynucleotide Sequence

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- Pat. Appln. SEQ ID NO 217
- Ceres seq id 1481863
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 218
  - Ceres seq id 1481864
  - Location of start within SEQ ID NO 217: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 219
    - Ceres seq id 1481865
    - Location of start within SEQ ID NO 217: at 71 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 246496

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 220
  - Ceres seq\_id 1481873
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 221
    - Ceres seq id 1481874
    - Location of start within SEQ ID NO 220: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 222
    - Ceres seq\_id 1481875
    - Location of start within SEQ ID NO 220: at 379 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 223
  - Ceres seq id 1481885
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 224
    - Ceres seq id 1481886
    - Location of start within SEQ ID NO 223: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 225
    - Ceres seq id 1481887
    - Location of start within SEQ ID NO 223: at 48 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 226
    - Ceres seq id 1481888
    - Location of start within SEO ID NO 223: at 109 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 247196

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 227
  - Ceres seq\_id 1481893
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 228
    - Ceres seq id 1481894
    - Location of start within SEQ ID NO 227: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 229
    - Ceres seq id 1481895
    - Location of start within SEQ ID NO 227: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 230
    - Ceres seq\_id 1481896
    - Location of start within SEQ ID NO 227: at 271 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 231
  - Ceres seq\_id 1481897
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 232
    - Ceres seq\_id 1481898
    - Location of start within SEQ ID NO 231: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 233
- Ceres seq id 1481899
- Location of start within SEQ ID NO 231: at 37 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 234
    - Ceres seq id 1481900
    - Location of start within SEQ ID NO 231: at 70 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 250561

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 235
  - Ceres seq\_id 1481901
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 236
    - Ceres seq id 1481902
    - Location of start within SEQ ID NO 235: at 150 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 237
  - Ceres seq\_id 1481903
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 238
    - Ceres seq\_id 1481904
    - Location of start within SEQ ID NO 237: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 239
    - Ceres seq id 1481905
    - Location of start within SEQ ID NO 237: at 68 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 240
    - Ceres seq\_id 1481906
    - Location of start within SEQ ID NO 237: at 116 nt.

(D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 250663

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 241
  - Ceres seq\_id 1481907
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 242
    - Ceres seq id 1481908
    - Location of start within SEQ ID NO 241: at 165 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 250775

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 243
  - Ceres seq\_id 1481913
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 244
    - Ceres seq\_id 1481914
    - Location of start within SEQ ID NO 243: at 126 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 245
    - Ceres seq\_id 1481915
    - Location of start within SEQ ID NO 243: at 291 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 246
  - Ceres seq id 1481916
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 247
    - Ceres seq\_id 1481917
    - Location of start within SEQ ID NO 246: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 248
    - Ceres seq id 1481918
    - Location of start within SEQ ID NO 246: at 231 nt.
- - (D) Related Amino Acid Sequences

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Maximum Length Sequence corresponding to clone ID 252000

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 249
  - Ceres seq id 1481919
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 250
    - Ceres seq\_id 1481920
    - Location of start within SEQ ID NO 249: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 251
    - Ceres seq id 1481921
    - Location of start within SEQ ID NO 249: at 48 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 252
    - Ceres seq\_id 1481922
    - Location of start within SEQ ID NO 249: at 198 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 252002

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 253
  - Ceres seq\_id 1481923
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 254
    - Ceres seq\_id 1481924
    - Location of start within SEQ ID NO 253: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 255
    - Ceres seq\_id 1481925
    - Location of start within SEQ ID NO 253: at 424 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 256
  - Ceres seq\_id 1481941
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 257

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- Ceres seq id 1481942
- Location of start within SEQ ID NO 256: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 258
    - Ceres seq id 1481943
    - Location of start within SEQ ID NO 256: at 71 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 259
    - Ceres seq id 1481944
    - Location of start within SEQ ID NO 256: at 74 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 257207

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 260
  - Ceres seq\_id 1481949
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 261
    - Ceres seq id 1481950
    - Location of start within SEQ ID NO 260: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition} % \begin{subarray}{ll} \end{subarray} % \begin{sub$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 262
    - Ceres seq id 1481951
    - Location of start within SEQ ID NO 260: at 276 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 263
    - Ceres seq id 1481952
    - Location of start within SEQ ID NO 260: at 454 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous} % \begin{array}{c} \text{Polyperiod} \\ \text{Pol$ 
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 264

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- Ceres seq\_id 1481965
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 265
  - Ceres seq\_id 1481966
  - Location of start within SEQ ID NO 264: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 266
    - Ceres seq\_id 1481967
    - Location of start within SEQ ID NO 264: at 103 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 267
    - Ceres seq id 1481968
    - Location of start within SEQ ID NO 264: at 327 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 266374

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 268
  - Ceres seq\_id 1481973
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 269
    - Ceres seq\_id 1481974
    - Location of start within SEQ ID'NO 268: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 270
    - Ceres seq\_id 1481975
    - Location of start within SEQ ID NO 268: at 113 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 271
  - Ceres seq\_id 1481976
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 272
    - Ceres seq\_id 1481977
    - Location of start within SEQ ID NO 271: at 2 nt.

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- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 273
    - Ceres seq id 1481978
    - Location of start within SEQ ID NO 271: at 5 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 274
    - Ceres seq id 1481979
    - Location of start within SEQ ID NO 271: at 65 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 266951

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 275
    - Ceres seq\_id 1481980
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 276
    - Ceres seq id 1481981
    - Location of start within SEQ ID NO 275: at 54 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 277
    - Ceres seq id 1481982
    - Location of start within SEQ ID NO 275: at 307 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 278
  - Ceres seq\_id 1481983
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 279
    - Ceres seq id 1481984
    - Location of start within SEQ ID NO 278: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 280

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- Ceres seq\_id 1481985
- Location of start within SEQ ID NO 278: at 31 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide} % \begin{array}{c} \text{Polypeptide}(s) \\ \text{Polypeptide}(s) \\$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 267032

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 281
  - Ceres seq id 1481986
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 282
    - Ceres seq id 1481987
    - Location of start within SEQ ID NO 281: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 283
    - Ceres seq id 1481988
    - Location of start within SEQ ID NO 281: at 38 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 284
    - Ceres seq id 1481989
    - Location of start within SEQ ID NO 281: at 131 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 285
  - Ceres seq\_id 1481990
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 286
    - Ceres seq\_id 1481991
    - Location of start within SEQ ID NO 285: at 157 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 287
    - Ceres seq id 1481992
    - Location of start within SEQ ID NO 285: at 163 nt.
- - (D) Related Amino Acid Sequences

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 288
  - Ceres seq id 1481993
  - Location of start within SEQ ID NO 285: at 412 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 267626

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 289
  - Ceres seq\_id 1481994
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 290
    - Ceres seq\_id 1481995
    - Location of start within SEQ ID NO 289: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 291
    - Ceres seq id 1481996
    - Location of start within SEQ ID NO 289: at 157 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 292
    - Ceres seq id 1481997
    - Location of start within SEQ ID NO 289: at 175 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 293
  - Ceres seq\_id 1482009
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 294
    - Ceres seq\_id 1482010
    - Location of start within SEQ ID NO 293: at 72 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 295
    - Ceres seq\_id 1482011
    - Location of start within SEQ ID NO 293: at 144 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln, SEQ ID NO 296
    - Ceres seq id 1482012
    - Location of start within SEQ ID NO 293: at 321 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 268652

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 297
  - Ceres seq\_id 1482013
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 298
    - Ceres seq\_id 1482014
    - Location of start within SEQ ID NO 297: at 33 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 299
    - Ceres seq id 1482015
    - Location of start within SEQ ID NO 297: at 156 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 268680

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 300
  - Ceres seq id 1482016

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 301
  - Ceres seq\_id 1482021
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 302
    - Ceres seq\_id 1482022
    - Location of start within SEQ ID NO 301: at 175 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 303
    - Ceres seq\_id 1482023
    - Location of start within SEQ ID NO 301: at 190 nt.

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- (D) Related Amino Acid Sequences
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 304
  - Ceres seq\_id 1482024
  - Location of start within SEQ ID NO 301: at 262 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 270513

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 305
  - Ceres seq\_id 1482029
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 306
    - Ceres seq\_id 1482030
    - Location of start within SEQ ID NO 305: at 86 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 307
    - Ceres seq\_id 1482031
    - Location of start within SEQ ID NO 305: at 194 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 308
    - Ceres seq id 1482032
    - Location of start within SEQ ID NO 305: at 203 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 309
  - Ceres seq\_id 1482033
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 310
    - Ceres seq id 1482034
    - Location of start within SEQ ID NO 309: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 311
    - Ceres seq id 1482035
    - Location of start within SEQ ID NO 309: at 2 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 312
    - Ceres seq id 1482036
    - Location of start within SEQ ID NO 309: at 119 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 271717

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 313
  - Ceres seq\_id 1482041
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 314
    - Ceres seq\_id 1482042
    - Location of start within SEQ ID NO 313: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 315
    - Ceres seq id 1482043
    - Location of start within SEQ ID NO 313: at 491 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 316
    - Ceres seq id 1482044
    - Location of start within SEQ ID NO 313: at 518 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide}$ 
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 317
  - Ceres seq id 1482045
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 318
    - Ceres seq id 1482046
    - Location of start within SEQ ID NO 317: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 319
- Ceres seq\_id 1482047
- Location of start within SEQ ID NO 317: at 71 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 320
    - Ceres seq\_id 1482048
    - Location of start within SEQ ID NO 317: at 149 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 271765

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 321
  - Ceres seq\_id 1482049
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 322
    - Ceres seq\_id 1482050
    - Location of start within SEQ ID NO 321: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 323
    - Ceres seq id 1482051
    - Location of start within SEQ ID NO 321: at 27 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 324
    - Ceres seq\_id 1482052
    - Location of start within SEQ ID NO 321: at 45 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 325
  - Ceres seq\_id 1482053
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 326
    - Ceres seq id 1482054
    - Location of start within SEQ ID NO 325: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)

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(D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272121

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 327
  - Ceres seq id 1482066
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 328
    - Ceres seq id 1482067
    - Location of start within SEQ ID NO 327: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 329
    - Ceres seq id 1482068
    - Location of start within SEQ ID NO 327: at 113 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272124

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 330
  - Ceres seq id 1482069
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 331
    - Ceres seq\_id 1482070
    - Location of start within SEQ ID NO 330: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition} % \begin{center} \begin{cente} \begin{center} \begin{center}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 332
    - Ceres seq\_id 1482071
    - Location of start within SEQ ID NO 330: at 162 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 333
    - Ceres seq id 1482072
    - Location of start within SEQ ID NO 330: at 186 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 334
  - Ceres seq id 1482073

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 335
  - Ceres seq\_id 1482074
  - Location of start within SEQ ID NO 334: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 336
    - Ceres seq id 1482075
    - Location of start within SEQ ID NO 334: at 272 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 337
    - Ceres seq id 1482076
    - Location of start within SEQ ID NO 334: at 344 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272155

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 338
  - Ceres seq\_id 1482081
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 339
    - Ceres seq id 1482082
    - Location of start within SEQ ID NO 338: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 340
    - Ceres seq id 1482083
    - Location of start within SEQ ID NO 338: at 8 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 341
    - Ceres seq\_id 1482084
    - Location of start within SEQ ID NO 338: at 178 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\,$ 
  - (D) Related Amino Acid Sequences

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- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 342
  - Ceres seq id 1482085
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 343
    - Ceres seq id 1482086
    - Location of start within SEQ ID NO 342: at 302 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272162

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 344
  - Ceres seq\_id 1482091
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 345
    - Ceres seq id 1482092
    - Location of start within SEQ ID NO 344: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 346
    - Ceres seq\_id 1482093
    - Location of start within SEQ ID NO 344: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 347
    - Ceres seq\_id 1482094
    - Location of start within SEQ ID NO 344: at 102 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 348
  - Ceres seq\_id 1482095
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 349
    - Ceres seq id 1482096
    - Location of start within SEQ ID NO 348: at 229 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 350
    - Ceres seq id 1482097

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- Location of start within SEQ ID NO 348: at 322 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272200

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 351
  - Ceres seq id 1482102
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 352
    - Ceres seq id 1482103
    - Location of start within SEQ ID NO 351: at 282 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 353
    - Ceres seq id 1482104
    - Location of start within SEQ ID NO 351: at 309 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 354
    - Ceres seq\_id 1482105
    - Location of start within SEQ ID NO 351: at 366 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272214 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 355
  - Ceres seq id 1482106
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 356
    - Ceres seq\_id 1482107
    - Location of start within SEQ ID NO 355: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 357
    - Ceres seg id 1482108
    - Location of start within SEQ ID NO 355: at 240 nt.
- - (D) Related Amino Acid Sequences

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Maximum Length Sequence corresponding to clone ID 272239

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- (A) Polynucleotide SequencePat. Appln. SEQ ID NO 358
  - Ceres seq\_id 1482113
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 359
    - Ceres seq\_id 1482114
    - Location of start within SEQ ID NO 358: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 360
    - Ceres seq\_id 1482115
    - Location of start within SEQ ID NO 358: at 97 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 361
    - Ceres seq\_id 1482116
    - Location of start within SEQ ID NO 358: at 121 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 362
  - Ceres seq id 1482117
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 363
    - Ceres seq\_id 1482118
    - Location of start within SEQ ID NO 362: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 364
    - Ceres seq\_id 1482119
    - Location of start within SEQ ID NO 362: at 69 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 365
    - Ceres seq\_id 1482120
    - Location of start within SEQ ID NO 362: at 264 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272258

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 366
  - Ceres seq id 1482121
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 367
    - Ceres seg id 1482122
    - Location of start within SEQ ID NO 366: at 3 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272301

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 368
  - Ceres seq\_id 1482127
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 369
    - Ceres seq id 1482128
    - Location of start within SEQ ID NO 368: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 370
    - Ceres seq\_id 1482129
    - Location of start within SEQ ID NO 368: at 92 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 371
    - Ceres seq id 1482130
    - Location of start within SEQ ID NO 368: at 529 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 372
  - Ceres seq\_id 1482131
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 373
    - Ceres seq\_id 1482132
    - Location of start within SEQ ID NO 372: at 3 nt.

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- (D) Related Amino Acid Sequences
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 374
  - Ceres seq\_id 1482133
  - Location of start within SEQ ID NO 372: at 42 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 375
    - Ceres seq\_id 1482134
    - Location of start within SEQ ID NO 372: at 168 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272389 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 376
  - Ceres seq\_id 1482135
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 377
  - Ceres seq id 1482136
  - Location of start within SEQ ID NO 376: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 378
    - Ceres seq id 1482137
    - Location of start within SEQ ID NO 376: at 7 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 379
  - Ceres seq\_id 1482142
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 380
    - Ceres seq id 1482143
    - Location of start within SEQ ID NO 379: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\cdot$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 381
    - Ceres seq\_id 1482144
    - Location of start within SEQ ID NO 379: at 2 nt.

- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 382
    - Ceres seq\_id 1482145
    - Location of start within SEQ ID NO 379: at 92 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272459

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 383
  - Ceres seq\_id 1482153
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 384
    - Ceres seg id 1482154
    - Location of start within SEQ ID NO 383: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 385
    - Ceres seq id 1482155
    - Location of start within SEQ ID NO 383: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 386
    - Ceres seq id 1482156
    - Location of start within SEQ ID NO 383: at 326 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 387
  - Ceres seq\_id 1482157
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 388
    - Ceres seq\_id 1482158
    - Location of start within SEQ ID NO 387: at 139 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 389
- Ceres seq\_id 1482159
- Location of start within SEQ ID NO 387: at 301 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 272506

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 390
  - Ceres seq\_id 1482164
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 391
    - Ceres seq id 1482165
    - Location of start within SEQ ID NO 390: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 392
    - Ceres seq\_id 1482166
    - Location of start within SEQ ID NO 390: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 275387

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 393
  - Ceres seq\_id 1482167
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 394
    - Ceres seq id 1482168
    - Location of start within SEQ ID NO 393: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 395
  - Ceres seq id 1482169
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 396
    - Ceres seq\_id 1482170
    - Location of start within SEQ ID NO 395: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 397
    - Ceres seq\_id 1482171

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- Location of start within SEQ ID NO 395: at 79 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 398
    - Ceres seq\_id 1482172
    - Location of start within SEQ ID NO 395: at 360 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 275778

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 399
  - Ceres seq id 1482177
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 400
    - Ceres seq id 1482178
    - Location of start within SEQ ID NO 399: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 401
    - Ceres seq\_id 1482179
    - Location of start within SEQ ID NO 399: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\begin{tabular}{ll} \end{tabular} \label{eq:condition}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 402
    - Ceres seq id 1482180
    - Location of start within SEQ ID NO 399: at 277 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 403
  - Ceres seq\_id 1482188
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 404
    - Ceres seq\_id 1482189
    - Location of start within SEQ ID NO 403: at 3 nt.
- - (D) Related Amino Acid Sequences

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Maximum Length Sequence corresponding to clone ID 276193

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 405
  - Ceres seq id 1482193
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 406
    - Ceres seq id 1482194
    - Location of start within SEQ ID NO 405: at 1 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 294676

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 407
  - Ceres seq\_id 1482205
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 408
    - Ceres seq id 1482206
    - Location of start within SEQ ID NO 407: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296069

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 409
  - Ceres seq id 1482207
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 410
    - Ceres seq\_id 1482208
    - Location of start within SEQ ID NO 409: at 124 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 411
    - Ceres seq\_id 1482209
    - Location of start within SEQ ID NO 409: at 226 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 412
    - Ceres seq\_id 1482210
    - Location of start within SEQ ID NO 409: at 271 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296091 (A) Polynucleotide Sequence

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- Pat. Appln. SEO ID NO 413
- Ceres seq id 1482217
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 414
  - Ceres seq id 1482218
  - Location of start within SEQ ID NO 413: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\cdot$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296096

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 415
  - Ceres seq id 1482219
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 416
    - Ceres seq id 1482220
    - Location of start within SEQ ID NO 415: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 417
    - Ceres seg id 1482221
    - Location of start within SEQ ID NO 415: at 72 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 418
  - Ceres seq\_id 1482230
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 419
    - Ceres seq id 1482231
    - Location of start within SEQ ID NO 418: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 420
    - Ceres seq\_id 1482232
    - Location of start within SEQ ID NO 418: at 125 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 421
    - Ceres seq\_id 1482233
    - Location of start within SEQ ID NO 418: at 152 nt.

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- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296209

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 422
  - Ceres seq id 1482234
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 423
    - Ceres seq\_id 1482235
    - Location of start within SEQ ID NO 422: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 424
    - Ceres seq\_id 1482236
    - Location of start within SEQ ID NO 422: at 221 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 425
    - Ceres seq\_id 1482237
    - Location of start within SEQ ID NO 422: at 287 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296211

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 426
  - Ceres seq\_id 1482238
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 427
    - Ceres seg id 1482239
    - Location of start within SEQ ID NO 426: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 428
    - Ceres seq\_id 1482240
    - Location of start within SEQ ID NO 426: at 3 nt.
- - (D) Related Amino Acid Sequences

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- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 429
  - Ceres seq\_id 1482245
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 430
    - Ceres seq\_id 1482246
    - Location of start within SEQ ID NO 429: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 431
    - Ceres seq\_id 1482247
    - Location of start within SEQ ID NO 429: at 176 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296228

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 432
  - Ceres seq\_id 1482248
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 433
    - Ceres seq\_id 1482249
    - Location of start within SEQ ID NO 432: at 120 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 434
    - Ceres seq id 1482250
    - Location of start within SEQ ID NO 432: at 249 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 435
    - Ceres seq id 1482251
    - Location of start within SEQ ID NO 432: at 312 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 436
  - Ceres seq\_id 1482254
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 437
    - Ceres seq\_id 1482255

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- Location of start within SEO ID NO 436: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 438
    - Ceres seq id 1482256
    - Location of start within SEQ ID NO 436: at 58 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296246 (A) Polynucleotide Sequence

- Pat. Appln. SEQ ID NO 439
  - Ceres seq\_id 1482257
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 440
  - Ceres seq id 1482258
  - Location of start within SEQ ID NO 439: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 441
    - Ceres seq\_id 1482259
    - Location of start within SEQ ID NO 439: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 442
    - Ceres seq id 1482260
    - Location of start within SEQ ID NO 439: at 3 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 443
  - Ceres seq id 1482261
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 444
    - Ceres seq id 1482262
    - Location of start within SEQ ID NO 443: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide} \begin{subarray}{c} \end{subarray}$ 
  - (D) Related Amino Acid Sequences

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 445
  - Ceres seq\_id 1482263
  - Location of start within SEQ ID NO 443: at 313 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 296648

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 446
  - Ceres seq\_id 1482264
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 447
    - Ceres seg id 1482265
    - Location of start within SEQ ID NO 446: at 2 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 297691

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 448
  - Ceres seq\_id 1482270
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 449
    - Ceres seq\_id 1482271
    - Location of start within SEQ ID NO 448: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 450
    - Ceres seq id 1482272
    - Location of start within SEQ ID NO 448: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 451
    - Ceres seq\_id 1482273
    - Location of start within SEQ ID NO 448: at 199 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 452
  - Ceres seq\_id 1482274
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 453

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- Ceres seq id 1482275
- Location of start within SEQ ID NO 452: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 454
    - Ceres seq id 1482276
    - Location of start within SEQ ID NO 452: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 455
    - Ceres seq id 1482277
    - Location of start within SEQ ID NO 452: at 3 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 299123

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 456
  - Ceres seq\_id 1482282
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 457
    - Ceres seq\_id 1482283
    - Location of start within SEQ ID NO 456: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 458
    - Ceres seq\_id 1482284
    - Location of start within SEQ ID NO 456: at 223 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 459
    - Ceres seq\_id 1482285
    - Location of start within SEQ ID NO 456: at 286 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 460

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- Ceres seq\_id 1482289
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 461
  - Ceres seq id 1482290
  - Location of start within SEQ ID NO 460: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 462
    - Ceres seq\_id 1482291
    - Location of start within SEQ ID NO 460: at 21 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 463
    - Ceres seq\_id 1482292
    - Location of start within SEQ ID NO 460: at 123 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 464
  - Ceres seq id 1482293
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 465
    - Ceres seq\_id 1482294
    - Location of start within SEQ ID NO 464: at 184 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 466
    - Ceres seq\_id 1482295
    - Location of start within SEQ ID NO 464: at 226 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 467
    - Ceres seq\_id 1482296
    - Location of start within SEQ ID NO 464: at 349 nt.
- - (D) Related Amino Acid Sequences

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Maximum Length Sequence corresponding to clone ID 300985

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 468
  - Ceres seq id 1482297
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 469
    - Ceres seq id 1482298
    - Location of start within SEQ ID NO 468: at 72 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 300986

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 470
  - Ceres seq id 1482299
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 471
    - Ceres seq id 1482300
    - Location of start within SEQ ID NO 470: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 472
    - Ceres seq id 1482301
    - Location of start within SEQ ID NO 470: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 300987

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 473
  - Ceres seq\_id 1482302
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 474
    - Ceres seq id 1482303
    - Location of start within SEQ ID NO 473: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 475
  - Ceres seq\_id 1482307
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 476
    - Ceres seq\_id 1482308
    - Location of start within SEQ ID NO 475: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$

- (D) Related Amino Acid Sequences
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 477
  - Ceres seq id 1482309
  - Location of start within SEQ ID NO 475: at 3 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301084

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 478
  - Ceres seq\_id 1482322
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 479
    - Ceres seq id 1482323
    - Location of start within SEQ ID NO 478: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 480
    - Ceres seq id 1482324
    - Location of start within SEQ ID NO 478: at 86 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 481
    - Ceres seq\_id 1482325
    - Location of start within SEQ ID NO 478: at 319 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301128

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 482
  - Ceres seq\_id 1482334
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 483
    - Ceres seq\_id 1482335
    - Location of start within SEQ ID NO 482: at 3 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 484
  - Ceres seq\_id 1482336

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 485
  - Ceres seq\_id 1482337
  - Location of start within SEQ ID NO 484: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 486
    - Ceres seq\_id 1482338
    - Location of start within SEQ ID NO 484: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301452

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 487
  - Ceres seq id 1482339
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 488
    - Ceres seg id 1482340
    - Location of start within SEQ ID NO 487: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 489
    - Ceres seq\_id 1482341
    - Location of start within SEQ ID NO 487: at 96 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 490
    - Ceres seq\_id 1482342
    - Location of start within SEQ ID NO 487: at 138 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 491
  - Ceres seq\_id 1482346
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 492
    - Ceres seq\_id 1482347
    - Location of start within SEQ ID NO 491: at 2 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 493
    - Ceres seq id 1482348
    - Location of start within SEQ ID NO 491: at 120 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301464

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 494
  - Ceres seq\_id 1482349
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 495
    - Ceres seq id 1482350
    - Location of start within SEQ ID NO 494: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 496
    - Ceres seq id 1482351
    - Location of start within SEQ ID NO 494: at 135 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 497
    - Ceres seq id 1482352
    - Location of start within SEQ ID NO 494: at 195 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 498
  - Ceres seq id 1482353
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 499
    - Ceres seq id 1482354
    - Location of start within SEQ ID NO 498: at 98 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 500

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- Ceres seq\_id 1482355
- Location of start within SEQ ID NO 498: at 242 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301483

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 501
  - Ceres seq id 1482356
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 502
    - Ceres seg id 1482357
    - Location of start within SEQ ID NO 501: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 503
    - Ceres seq\_id 1482358
    - Location of start within SEQ ID NO 501: at 3 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 504
  - Ceres seq id 1482359
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 505
    - Ceres seq id 1482360
    - Location of start within SEQ ID NO 504: at 14 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 506
    - Ceres seq id 1482361
    - Location of start within SEQ ID NO 504: at 294 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 507
    - Ceres seq\_id 1482362
    - Location of start within SEQ ID NO 504: at 297 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301535

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 508
  - Ceres seq id 1482363
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 509
    - Ceres seq id 1482364
    - Location of start within SEQ ID NO 508: at 51 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 510
    - Ceres seq id 1482365
    - Location of start within SEQ ID NO 508: at 86 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 511
    - Ceres seq id 1482366
    - Location of start within SEQ ID NO 508: at 205 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 512
  - Ceres seq\_id 1482371
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 513
    - Ceres seq\_id 1482372
    - Location of start within SEQ ID NO 512: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 514
    - Ceres seq\_id 1482373
    - Location of start within SEQ ID NO 512: at 206 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 515
    - Ceres seq id 1482374
    - Location of start within SEQ ID NO 512: at 224 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301552

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 516
  - Ceres seq\_id 1482375
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 517
    - Ceres seq\_id 1482376
    - Location of start within SEQ ID NO 516: at 151 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 518
    - Ceres seq\_id 1482377
    - Location of start within SEQ ID NO 516: at 166 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301559

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 519
  - Ceres seq\_id 1482378
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 520
    - Ceres seq id 1482379
    - Location of start within SEQ ID NO 519: at 83 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 521
    - Ceres seq\_id 1482380
    - Location of start within SEQ ID NO 519: at 113 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 522
    - Ceres seq\_id 1482381
    - Location of start within SEQ ID NO 519: at 143 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301584 (A) Polynucleotide Sequence

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- Pat. Appln. SEQ ID NO 523
- Ceres seq id 1482382
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 524
  - Ceres seq id 1482383
  - Location of start within SEQ ID NO 523: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 525
    - Ceres seq\_id 1482384
    - Location of start within SEQ ID NO 523: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 526
    - Ceres seq\_id 1482385
    - Location of start within SEQ ID NO 523: at 191 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 527
  - Ceres seq\_id 1482386
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 528
    - Ceres seq\_id 1482387
    - Location of start within SEQ ID NO 527: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 529
    - Ceres seq\_id 1482388
    - Location of start within SEQ ID NO 527: at 34 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 530
    - Ceres seq\_id 1482389
    - Location of start within SEQ ID NO 527: at 437 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

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Maximum Length Sequence corresponding to clone ID 301930

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 531
  - Ceres seq id 1482398
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 532
    - Ceres seq\_id 1482399
    - Location of start within SEQ ID NO 531: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 533
    - Ceres seq id 1482400
    - Location of start within SEQ ID NO 531: at 98 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 534
    - Ceres seq\_id 1482401
    - Location of start within SEQ ID NO 531: at 425 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301956

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 535
  - Ceres seq\_id 1482402
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 536
    - Ceres seq id 1482403
    - Location of start within SEQ ID NO 535: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 537
  - Ceres seq id 1482404
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 538
    - Ceres seq\_id 1482405
    - Location of start within SEQ ID NO 537: at 1 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 539
- Ceres seq id 1482406
- Location of start within SEQ ID NO 537: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 540
    - Ceres seq id 1482407
    - Location of start within SEQ ID NO 537: at 182 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 301981

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 541
  - Ceres seq\_id 1482408
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 542
    - Ceres seq\_id 1482409
    - Location of start within SEQ ID NO 541: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 543
    - Ceres seq\_id 1482410
    - Location of start within SEQ ID NO 541: at 442 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 544
  - Ceres seq id 1482411
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 545
    - Ceres seq id 1482412
    - Location of start within SEQ ID NO 544: at 94 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 546
    - Ceres seq id 1482413
    - Location of start within SEQ ID NO 544: at 155 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)

(D) Related Amino Acid Sequences

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- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 547
  - Ceres seq id 1482414
  - Location of start within SEQ ID NO 544: at 620 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 302016

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 548
  - Ceres seq\_id 1482415
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 549
    - Ceres seq id 1482416
    - Location of start within SEQ ID NO 548: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 550
    - Ceres seq id 1482417
    - Location of start within SEQ ID NO 548: at 107 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 551
  - Ceres seq\_id 1482418
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 552
    - Ceres seq\_id 1482419
    - Location of start within SEQ ID NO 551: at 3 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 553
    - Ceres seq\_id 1482420
    - Location of start within SEQ ID NO 551: at 105 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 554
    - Ceres seq id 1482421
    - Location of start within SEQ ID NO 551: at 135 nt.

- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 302415

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 555
  - Ceres seq id 1482422
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 556
    - Ceres seq\_id 1482423
    - Location of start within SEQ ID NO 555: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 304700

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 557
  - Ceres seq\_id 1482424
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 558
    - Ceres seq id 1482425
    - Location of start within SEQ ID NO 557: at 1 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 559
    - Ceres seq\_id 1482426
    - Location of start within SEQ ID NO 557: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 560
    - Ceres seq\_id 1482427
    - Location of start within SEQ ID NO 557: at 3 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 561
  - Ceres seq\_id 1482428
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 562
    - Ceres seq\_id 1482429
    - Location of start within SEQ ID NO 561: at 206 nt.

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- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 304764

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 563
  - Ceres seq id 1482430
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 564
    - Ceres seq id 1482431
    - Location of start within SEQ ID NO 563: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 565
    - Ceres seq id 1482432
    - Location of start within SEQ ID NO 563: at 11 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 566
    - Ceres seq id 1482433
    - Location of start within SEQ ID NO 563: at 86 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 567
  - Ceres seq\_id 1482434
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 568
    - Ceres seq\_id 1482435
    - Location of start within SEQ ID NO 567: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 569
    - Ceres seq\_id 1482436
    - Location of start within SEQ ID NO 567: at 9 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 570

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- Ceres seq id 1482437
- Location of start within SEQ ID NO 567: at 18 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 305124

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 571
  - Ceres seq id 1482438
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 572
    - Ceres seq\_id 1482439
    - Location of start within SEQ ID NO 571: at 3 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 30994

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 573
  - Ceres seq id 1482444
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 574
    - Ceres seq id 1482445
    - Location of start within SEQ ID NO 573: at 2 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 575
    - Ceres seq\_id 1482446
    - Location of start within SEQ ID NO 573: at 134 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 576
    - Ceres seq\_id 1482447
    - Location of start within SEQ ID NO 573: at 143 nt.
- - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 577
  - Ceres seq\_id 1482457
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 578
    - Ceres seq id 1482458
    - Location of start within SEQ ID NO 577: at 1 nt.

- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 579
    - Ceres seq\_id 1482459
    - Location of start within SEQ ID NO 577: at 35 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:polypeptide}$ 
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 35310

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 580
  - Ceres seq\_id 1482460
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 581
    - Ceres seq\_id 1482461
    - Location of start within SEQ ID NO 580: at 119 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 582
    - Ceres seq\_id 1482462
    - Location of start within SEQ ID NO 580: at 203 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 583
    - Ceres seq\_id 1482463
    - Location of start within SEQ ID NO 580: at 470 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 584
  - Ceres seq\_id 1482481
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 585
    - Ceres seq\_id 1482482
    - Location of start within SEQ ID NO 584: at 110 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence

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- Pat. Appln. SEQ ID NO 586
- Ceres seq id 1482483
- Location of start within SEQ ID NO 584: at 233 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 587
    - Ceres seq\_id 1482484
    - Location of start within SEQ ID NO 584: at 425 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 38293

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 588
  - Ceres seq\_id 1482490
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 589
    - Ceres seq\_id 1482491
    - Location of start within SEQ ID NO 588: at 104 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 590
    - Ceres seq\_id 1482492
    - Location of start within SEQ ID NO 588: at 138 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 591
    - Ceres seq\_id 1482493
    - Location of start within SEQ ID NO 588: at 151 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 592
  - Ceres seq\_id 1482504
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 593
    - Ceres seq\_id 1482505
    - Location of start within SEQ ID NO 592: at 113 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:condition}$

- (D) Related Amino Acid Sequences
- (B) Polypeptide Sequence
  - Pat. Appln. SEQ ID NO 594
  - Ceres seq id 1482506
  - Location of start within SEQ ID NO 592: at 149 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 595
    - Ceres seq\_id 1482507
    - Location of start within SEQ ID NO 592: at 642 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 4026

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 596
  - Ceres seg id 1482508
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 597
    - Ceres seq\_id 1482509
    - Location of start within SEQ ID NO 596: at 139 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 598
    - Ceres seq id 1482510
    - Location of start within SEQ ID NO 596: at 475 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 599
  - Ceres seq\_id 1482514
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 600
    - Ceres seq\_id 1482515
    - Location of start within SEQ ID NO 599: at 33 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 601
    - Ceres seq id 1482516
    - Location of start within SEQ ID NO 599: at 39 nt.

- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\cdot$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 602
    - Ceres seq id 1482517
    - Location of start within SEQ ID NO 599: at 66 nt.
- - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 6091

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 603
  - Ceres seq\_id 1482525
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 604
    - Ceres seq\_id 1482526
    - Location of start within SEQ ID NO 603: at 79 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

Maximum Length Sequence corresponding to clone ID 9184

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 605
  - Ceres seq id 1482535
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 606
    - Ceres seq id 1482536
    - Location of start within SEQ ID NO 605: at 3 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 607
    - Ceres seq id 1482537
    - Location of start within SEQ ID NO 605: at 33 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 608
    - Ceres seq\_id 1482538
    - Location of start within SEQ ID NO 605: at 198 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

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- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 609
  - Ceres seq\_id 1482542
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 610
    - Ceres seq\_id 1482543
    - Location of start within SEQ ID NO 609: at 2 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 611
    - Ceres seq\_id 1482544
    - Location of start within SEQ ID NO 609: at 227 nt.
- - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 612
    - Ceres seq\_id 1482545
    - Location of start within SEQ ID NO 609: at 275 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences

- (A) Polynucleotide Sequence
  - Pat. Appln. SEQ ID NO 613
  - Ceres seq\_id 1482546
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 614
    - Ceres seq\_id 1482547
    - Location of start within SEQ ID NO 613: at 218 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 615
    - Ceres seq\_id 1482548
    - Location of start within SEQ ID NO 613: at 227 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)  $\label{eq:continuous}$ 
  - (D) Related Amino Acid Sequences
  - (B) Polypeptide Sequence
    - Pat. Appln. SEQ ID NO 616
    - Ceres seq\_id 1482549
    - Location of start within SEQ ID NO 613: at 260 nt.
- (C) Nomination and Annotation of Domains within Predicted Polypeptide(s)

- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1458 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1458
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481332
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

atcogtttcg ccatttttgt ttctcagtga tctctgaaat ggtctcttct ctttttttgg 60 tcqaatccaa tctcaattat gttgttatct ttcttccatc aatgggtaat caaaacatag 120 aattgatgcg gtaagactat aaaggtttag tetttaacca ttgtagatte etetgtetet 180 tgtgtatttg attgatctgt taatggataa ccaaaaaggt gctctctttc ccqatqaggt 240 tattctccaq attcttqcta gattacctqt taaatctctc ttcaqqttca aatccqtttq 300 caaatcatgg tacagattac cttctqacaa atatttcact tccttqttca atcaactctc 360 tgtaaaagag caattgcttg tggctcaagt atcagattct tctagtttga tctgtgttga 420 taatctgaga ggtgtttctg agttatcatt ggattttgtt agagataggg tgaggattag 480 ggtttcttct aatggtttgt tgtgttgttc aagcattcct gaaaagggtg tttactatgt 540 ttgtaatccg tcgactagag agtacaggaa attgcctaag agtcgagaaa gacccgttac 600 tcggttttat cctgacggtg aggctacact tgttggtttg gcttgtgatt tgagtaggaa 660 caagtttaat gtggtgttgg ctggttacca taggtctttt ggtcaqagac ctgatgggag 720 tttcatttgc ttggtgtttg attctgagag taacaaatgg aggaagtttg tttcggtgtt 780 agaagaatgt agtttcacac acatgagtaa gaaccaagtg gtgtttgtta atgggatgct 840 tcattggttg atgagtggtt tgtgttatat acttgcactt gatgttgaac atgatgtgtg 900 gagaaagatt tctttgcctg atgagattaa aatcgggaat ggtggtggta atcgggttta 960 tctcttggaa tccgatgggt ttttgtcggt gattcagtta tcagatgtat ggatgaagat 1020 ttggaagatg agtgagtatg agactgaaac ttggagtgtt gttgatagca taagtttaag 1080 gtgcattaaa ggattggtac ctggaatctt cccgatttgt cagaccggtg agtatgtttt 1140 cttggctact cataaacagg ttttggtgta tcaaagacga agtaagttat ggaaagagat 1200 gttttctgta aaaggaaget ettetetgee tttgtggtte tetgeteaeg cetttegeag 1260 caccatagta coctgtaatt agcatgttta tgtttccttc tctactcttt tattttttg 1320 gtttatgttc agctcttgga tcttttaggg cttatgaaaa tttgttcaag gttttataat 1380 ctttctggga taacatcata taaagtaatg tacagttgat ttcttctgtt gcttttagta 1440 caaatagagt tttggttg

- (2) INFORMATION FOR SEQ ID NO:2:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 359 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..359
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481333
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Asp Asn Gln Lys Gly Ala Leu Phe Pro Asp Glu Val Ile Leu Gln 1 5 10 15

Ile Leu Ala Arg Leu Pro Val Lys Ser Leu Phe Arg Phe Lys Ser Val
20 25 30

Cys Lys Ser Trp Tyr Arg Leu Pro Ser Asp Lys Tyr Phe Thr Ser Leu
35 40 45

Phe Asn Gln Leu Ser Val Lys Glu Gln Leu Leu Val Ala Gln Val Ser 50 55 60

Asp Ser Ser Ser Leu Ile Cys Val Asp Asn Leu Arg Gly Val Ser Glu 65 70 75 80

Leu Ser Leu Asp Phe Val Arq Asp Arq Val Arq Ile Arq Val Ser Ser 90 Asn Gly Leu Leu Cys Cys Ser Ser Ile Pro Glu Lys Gly Val Tyr Tyr 105 Val Cys Asn Pro Ser Thr Arg Glu Tyr Arg Lys Leu Pro Lys Ser Arg 120 125 Glu Arg Pro Val Thr Arg Phe Tyr Pro Asp Gly Glu Ala Thr Leu Val 135 140 Gly Leu Ala Cys Asp Leu Ser Arg Asn Lys Phe Asn Val Val Leu Ala 150 155 Gly Tyr His Arg Ser Phe Gly Gln Arg Pro Asp Gly Ser Phe Ile Cys 165 170 175 Leu Val Phe Asp Ser Glu Ser Asn Lys Trp Arg Lys Phe Val Ser Val 180 185 190 Leu Glu Glu Cys Ser Phe Thr His Met Ser Lys Asn Gln Val Val Phe 200 205 Val Asn Gly Met Leu His Trp Leu Met Ser Gly Leu Cys Tyr Ile Leu 220 215 Ala Leu Asp Val Glu His Asp Val Trp Arg Lys Ile Ser Leu Pro Asp 230 235 Glu Ile Lys Ile Gly Asn Gly Gly Gly Asn Arg Val Tyr Leu Leu Glu 245 250 Ser Asp Gly Phe Leu Ser Val Ile Gln Leu Ser Asp Val Trp Met Lys 265 270 Ile Trp Lys Met Ser Glu Tyr Glu Thr Glu Thr Trp Ser Val Val Asp 280 Ser Ile Ser Leu Arg Cys Ile Lys Gly Leu Val Pro Gly Ile Phe Pro 295 Ile Cys Gln Thr Gly Glu Tyr Val Phe Leu Ala Thr His Lys Gln Val 310 315 Leu Val Tyr Gln Arg Arg Ser Lys Leu Trp Lys Glu Met Phe Ser Val 325 330 Lys Gly Ser Ser Leu Pro Leu Trp Phe Ser Ala His Ala Phe Arg 340 345 Ser Thr Ile Val Pro Cys Asn

- (2) INFORMATION FOR SEQ ID NO:3:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1353 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:

355

- (A) NAME/KEY: -
- (B) LOCATION: 1..1353
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481342
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

| casragamcc | atwacywaga | amcaycctaa | tcgaaaaaac | gccacaatca | tggctttgtt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cttatctcct | aaaaccatca | ctcttctctt | cttctccctc | tccctcgcac | tctactgcag | 120 |
| catcgatcct | ttccaccact | gcgccatttc | cgatttcccc | aatttcgtct | ctcacgaagt | 180 |
| tatctctcca | cgtcccgacg | aagttccatg | ggagagagat | tcacaaaatt | cacttcagaa | 240 |
| atcaaagatt | ctgttttta  | accaaatcca | aggtccagag | agcgtcgcct | ttgattctct | 300 |
| cggacgtggt | ccgtacacag | gcgttgctga | tggtagggtt | ttgttttggg | atggagagaa | 360 |
| atggattgat | ttcgcttata | cttcgagtaa | tcgatcggag | atttgtgatc | cgaagccttc | 420 |
| tgctttgagt | tacttgagga | atgaacatat | atgtggtcgt | cctttaggtc | ttcgtttcga | 480 |
| taagagaacc | ggagatttgt | atatagctga | tgcttatatg | ggacttttga | aagttggtcc | 540 |
| tgaaggtggt | ttagcaacgc | cgcttgtaac | tgaagctgaa | ggtgtgccgt | tggggtttac | 600 |
| taatgatctt | gacattgctg | atgatggaac | tgtttacttt | acagatagca | gcattagtta | 660 |

720 ccagaggagg aacttcttgc agctcgtttt ctctggagac aatactggga gggttctaaa gtatgatcca gtagctaaga aagctgttgt tttggtctca aatcttcagt ttccgaatgg 780 840 tgtctctatc agcagagacg gttctttctt tgtattctgc gaaggagata ttggaagcct acgaagatac tggttgaaag gcgagaaagc tggaacgaca gatgtgtttg cgtatttacc 900 agggcatcct gataacgtaa gaaccaacca aaagggtgaa ttttgggtag cgcttcattg 960 cagacgcaac tactactcat acttaatggc aagatatcct aagctgagga tgttcatact 1020 1080 gagactgcca atcactgcga gaactcacta ctcgttccag atagggttac ggccgcacgg gttggtggtt aagtatagtc ctgaagggaa gcttatgcat gttttggaag atagtgaagg 1140 1200 gaaagttgtg agatcagtaa gtgaagtgga agaaaaagat gggaagcttt ggatgggaag 1260 tgtgttgatg aactttgttg ctgtctatga cctctgatta cttgacctat acgtaaacca 1320 cttcactcag tttctagatt tagcaaattc tcaaaactgt taggtgtgta ctgaaaaaat

- (2) INFORMATION FOR SEQ ID NO:4:
  - (i) SEQUENCE CHARACTERISTICS:

caaacactta gcacaaacaa actcaatgtt att

- (A) LENGTH: 411 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..411
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481343
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4: Xaa Arg Xaa Xaa Xaa Xaa Xaa Pro Asn Arg Lys Asn Ala Thr Ile 10 Met Ala Leu Phe Leu Ser Pro Lys Thr Ile Thr Leu Leu Phe Phe Ser 25 Leu Ser Leu Ala Leu Tyr Cys Ser Ile Asp Pro Phe His His Cys Ala 40 Ile Ser Asp Phe Pro Asn Phe Val Ser His Glu Val Ile Ser Pro Arg 55 60 Pro Asp Glu Val Pro Trp Glu Arg Asp Ser Gln Asn Ser Leu Gln Lys 75 70 Ser Lys Ile Leu Phe Phe Asn Gln Ile Gln Gly Pro Glu Ser Val Ala 85 90 Phe Asp Ser Leu Gly Arg Gly Pro Tyr Thr Gly Val Ala Asp Gly Arg 105 100 Val Leu Phe Trp Asp Gly Glu Lys Trp Ile Asp Phe Ala Tyr Thr Ser 120 Ser Asn Arg Ser Glu Ile Cys Asp Pro Lys Pro Ser Ala Leu Ser Tyr 135 140 Leu Arg Asn Glu His Ile Cys Gly Arg Pro Leu Gly Leu Arg Phe Asp 150 155 Lys Arg Thr Gly Asp Leu Tyr Ile Ala Asp Ala Tyr Met Gly Leu Leu 170 Lys Val Gly Pro Glu Gly Gly Leu Ala Thr Pro Leu Val Thr Glu Ala 185 190 Glu Gly Val Pro Leu Gly Phe Thr Asn Asp Leu Asp Ile Ala Asp Asp 200 205 Gly Thr Val Tyr Phe Thr Asp Ser Ser Ile Ser Tyr Gln Arg Arg Asn 220 215 Phe Leu Gln Leu Val Phe Ser Gly Asp Asn Thr Gly Arg Val Leu Lys 230 235 Tyr Asp Pro Val Ala Lys Lys Ala Val Val Leu Val Ser Asn Leu Gln 250

Phe Pro Asn Gly Val Ser Ile Ser Arg Asp Gly Ser Phe Phe Val Phe 265 Cys Glu Gly Asp Ile Gly Ser Leu Arg Arg Tyr Trp Leu Lys Gly Glu ·I ij 1

280 285 Lys Ala Gly Thr Thr Asp Val Phe Ala Tyr Leu Pro Gly His Pro Asp 295 Asn Val Arg Thr Asn Gln Lys Gly Glu Phe Trp Val Ala Leu His Cys 315 310 Arg Arg Asn Tyr Tyr Ser Tyr Leu Met Ala Arg Tyr Pro Lys Leu Arg 330 325 Met Phe Ile Leu Arg Leu Pro Ile Thr Ala Arg Thr His Tyr Ser Phe 345 Gln Ile Gly Leu Arg Pro His Gly Leu Val Val Lys Tyr Ser Pro Glu 365 360 Gly Lys Leu Met His Val Leu Glu Asp Ser Glu Gly Lys Val Val Arg 375 380 Ser Val Ser Glu Val Glu Glu Lys Asp Gly Lys Leu Trp Met Gly Ser 395 390 Val Leu Met Asn Phe Val Ala Val Tyr Asp Leu 405

- (2) INFORMATION FOR SEQ ID NO:5:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 395 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..395
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481344
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5: Met Ala Leu Phe Leu Ser Pro Lys Thr Ile Thr Leu Leu Phe Phe Ser 10 Leu Ser Leu Ala Leu Tyr Cys Ser Ile Asp Pro Phe His His Cys Ala 2.0 25 Ile Ser Asp Phe Pro Asn Phe Val Ser His Glu Val Ile Ser Pro Arg 40 Pro Asp Glu Val Pro Trp Glu Arg Asp Ser Gln Asn Ser Leu Gln Lys 55 Ser Lys Ile Leu Phe Phe Asn Gln Ile Gln Gly Pro Glu Ser Val Ala 70 75 Phe Asp Ser Leu Gly Arg Gly Pro Tyr Thr Gly Val Ala Asp Gly Arg 90 Val Leu Phe Trp Asp Gly Glu Lys Trp Ile Asp Phe Ala Tyr Thr Ser 105 Ser Asn Arg Ser Glu Ile Cys Asp Pro Lys Pro Ser Ala Leu Ser Tyr 120 Leu Arg Asn Glu His Ile Cys Gly Arg Pro Leu Gly Leu Arg Phe Asp 135 140 Lys Arg Thr Gly Asp Leu Tyr Ile Ala Asp Ala Tyr Met Gly Leu Leu 150 155 Lys Val Gly Pro Glu Gly Gly Leu Ala Thr Pro Leu Val Thr Glu Ala 170 165 Glu Gly Val Pro Leu Gly Phe Thr Asn Asp Leu Asp Ile Ala Asp Asp 185 Gly Thr Val Tyr Phe Thr Asp Ser Ser Ile Ser Tyr Gln Arg Arg Asn 200 205 Phe Leu Gln Leu Val Phe Ser Gly Asp Asn Thr Gly Arg Val Leu Lys 215 220 Tyr Asp Pro Val Ala Lys Lys Ala Val Val Leu Val Ser Asn Leu Gln 230 235

Phe Pro Asn Gly Val Ser Ile Ser Arg Asp Gly Ser Phe Phe Val Phe 245 250 Cys Glu Gly Asp Ile Gly Ser Leu Arg Arg Tyr Trp Leu Lys Gly Glu 265 270 260 Lys Ala Gly Thr Thr Asp Val Phe Ala Tyr Leu Pro Gly His Pro Asp 280 275 285 Asn Val Arg Thr Asn Gln Lys Gly Glu Phe Trp Val Ala Leu His Cys 295 300 Arg Arg Asn Tyr Tyr Ser Tyr Leu Met Ala Arg Tyr Pro Lys Leu Arg 310 315 Met Phe Ile Leu Arg Leu Pro Ile Thr Ala Arg Thr His Tyr Ser Phe 330 Gln Ile Gly Leu Arg Pro His Gly Leu Val Val Lys Tyr Ser Pro Glu 345 Gly Lys Leu Met His Val Leu Glu Asp Ser Glu Gly Lys Val Val Arg 360 365 Ser Val Ser Glu Val Glu Glu Lys Asp Gly Lys Leu Trp Met Gly Ser 375 Val Leu Met Asn Phe Val Ala Val Tyr Asp Leu 390

- (2) INFORMATION FOR SEQ ID NO:6:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 239 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..239
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481345
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6: Met Gly Leu Leu Lys Val Gly Pro Glu Gly Gly Leu Ala Thr Pro Leu 10 Val Thr Glu Ala Glu Gly Val Pro Leu Gly Phe Thr Asn Asp Leu Asp 25 Ile Ala Asp Asp Gly Thr Val Tyr Phe Thr Asp Ser Ser Ile Ser Tyr 40 Gln Arg Arg Asn Phe Leu Gln Leu Val Phe Ser Gly Asp Asn Thr Gly 55 Arg Val Leu Lys Tyr Asp Pro Val Ala Lys Lys Ala Val Val Leu Val Ser Asn Leu Gln Phe Pro Asn Gly Val Ser Ile Ser Arg Asp Gly Ser 90 Phe Phe Val Phe Cys Glu Gly Asp Ile Gly Ser Leu Arg Arg Tyr Trp 105 Leu Lys Gly Glu Lys Ala Gly Thr Thr Asp Val Phe Ala Tyr Leu Pro 120 Gly His Pro Asp Asn Val Arg Thr Asn Gln Lys Gly Glu Phe Trp Val 135 Ala Leu His Cys Arg Arg Asn Tyr Tyr Ser Tyr Leu Met Ala Arg Tyr 150 155 Pro Lys Leu Arg Met Phe Ile Leu Arg Leu Pro Ile Thr Ala Arg Thr 165 170 His Tyr Ser Phe Gln Ile Gly Leu Arg Pro His Gly Leu Val Lys 185 Tyr Ser Pro Glu Gly Lys Leu Met His Val Leu Glu Asp Ser Glu Gly

195 200 205 Lys Val Val Arg Ser Val Ser Glu Val Glu Glu Lys Asp Gly Lys Leu

210 \$215\$ \$220\$ Trp Met Gly Ser Val Leu Met Asn Phe Val Ala Val Tyr Asp Leu 225 \$230\$ \$235\$

- (2) INFORMATION FOR SEQ ID NO:7:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1279 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1279
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481346
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

atcaccattg ctttgttttg ttcgtcaaat ataatcaatt ttaaatttct tctcttctc 60 120 tcaaacgaat cgcctttttc gataatctct ttgcatcgat ttcatcatgg ctactcaaac 180 ggatctcgct cagcccaagc ttgatatgac caaggaggag aaagagaggt tgaagtattt 240 qcaattcqtq caaqctqctq ctqtqqaaqc tctqcttcqc tttqctctta tttacgctaa 300 qqcaaaggac aagtctggtc ctttgaaacc tggtgttgaa tctgttgaag gagctgtcaa gactgtcgtt ggtcctgtct acgagaaata ccacgacgtc cctgttgagg tccttaaata 360 420 catqqaccaq aaqqtacaat tttqactctt tccctatctt tggatcttgc tgaaagtgcc tttgttgatg aacaatgaat gaatctgtgt tgttgattgt atatccactt catcgaacat 480 540 atgtgattaa aaaagtacag ttaaagttgt gatgatttca tatcatctct ttggtagaag gttcaggtta acgggtcaat gtcattatgt tctgtagagt ccctcttttt gaagctgaca 600 agtttgtttt gcgttgttgc aggttgatat gtctgtgact gagcttgacc gtcgtgtccc 660 accagtcgtc aagcaagtgt ctgcccaagc catctccgct gctcagatag cacccattgt 720 ggcacgtgcg ttggcctctg aggttcgacg tgctggtgtt gttgaaaccg cttctggaat 780 840 ggctaaatcc gtctactcca agtacgagcc tgctgctaag gagttgtatg caaactatga 900 gccaaaagca aagcagtgtg ccgtttcagc ttggaagaag cttaaccagc ttcctctatt cccaaggctg gctcaagttg ctgtaccaac agctgctttc tgctctgaga agtacaatga 960 1020 tactqtqqtt aaggctqcaq agaaagggta cagagtcaca tcgtacatgc cattggttcc aacagagagg atctcaaaaa tcttcgctga ggagaaagct gagaccgagc ctttggagtt 1080 1140 ccatccactt gattgatatg ggtgttttgt tagtgtgatt ttttgttttg ttgggattaa ggtgaaccgg atcttggtta gcgattgatc tctggttctc gttcttttt ttctttgtca 1200 1260 tgaacttttg ttgtttcgtt taataatcaa aagttgtata atctaagttt gggattacca ccctattgag tattgagtg

- (2) INFORMATION FOR SEQ ID NO:8:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 155 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..155
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481347
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Met Ser Val Thr Glu Leu Asp Arg Arg Val Pro Pro Val Val Lys Gln 1 5 10 15

Val Ser Ala Gln Ala Ile Ser Ala Ala Gln Ile Ala Pro Ile Val Ala 20 25 30

Arg Ala Leu Ala Ser Glu Val Arg Arg Ala Gly Val Val Glu Thr Ala 35 40 45

Ser Gly Met Ala Lys Ser Val Tyr Ser Lys Tyr Glu Pro Ala Ala Lys 50 55 60

Glu Leu Tyr Ala Asn Tyr Glu Pro Lys Ala Lys Gln Cys Ala Val Ser 65 70 75 80

Ala Trp Lys Lys Leu Asn Gln Leu Pro Leu Phe Pro Arg Leu Ala Gln 85 90 95
Val Ala Val Pro Thr Ala Ala Phe Cys Ser Glu Lys Tyr Asn Asp Thr

Val Ala Val Pro Thr Ala Ala Phe Cys Ser Glu Lys Tyr Asn Asp Thr 100 105 110

Val Val Lys Ala Ala Glu Lys Gly Tyr Arg Val Thr Ser Tyr Met Pro 115 120 125

Leu Val Pro Thr Glu Arg Ile Ser Lys Ile Phe Ala Glu Glu Lys Ala 130 135 140

Glu Thr Glu Pro Leu Glu Phe His Pro Leu Asp 145 150 155

- (2) INFORMATION FOR SEQ ID NO:9:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 105 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..105
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481348
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Met Ala Lys Ser Val Tyr Ser Lys Tyr Glu Pro Ala Ala Lys Glu Leu 1 10 15

Tyr Ala Asn Tyr Glu Pro Lys Ala Lys Gln Cys Ala Val Ser Ala Trp 20 25 30

Lys Lys Leu Asn Gln Leu Pro Leu Phe Pro Arg Leu Ala Gln Val Ala 35 40 45

Val Pro Thr Ala Ala Phe Cys Ser Glu Lys Tyr Asn Asp Thr Val Val
50 55 60

Lys Ala Ala Glu Lys Gly Tyr Arg Val Thr Ser Tyr Met Pro Leu Val 65 70 75 80

Pro Thr Glu Arg Ile Ser Lys Ile Phe Ala Glu Glu Lys Ala Glu Thr 85 90 95

Glu Pro Leu Glu Phe His Pro Leu Asp 100 105

- (2) INFORMATION FOR SEQ ID NO:10:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 96 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..96
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481349
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Met Gln Thr Met Ser Gln Lys Gln Ser Ser Val Pro Phe Gln Leu Gly
1 10 15

Arg Ser Leu Thr Ser Phe Leu Tyr Ser Gln Gly Trp Leu Lys Leu Leu 20 25 30

Tyr Gln Gln Leu Ser Ala Leu Arg Ser Thr Met Ile Leu Trp Leu 35 40 45

Arg Leu Gln Arg Lys Gly Thr Glu Ser His Arg Thr Cys His Trp Phe 50 55 60

Gln Gln Arg Gly Ser Gln Lys Ser Ser Leu Arg Arg Lys Leu Arg Pro 65 70 75 80 Ser Leu Trp Ser Ser Ile His Leu Ile Asp Met Gly Val Leu Leu Val

85 90 95

- (2) INFORMATION FOR SEQ ID NO:11:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1211 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1211
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481357
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11: 60 aacatcctaa tcgaaaaaaa aaaacataaa acacataggg gtgggtctct ctcctccgga attegateac gacggcaagg acgacgcate teetteteec acagggctgg agatggatet 120 180 ggtccggtga tttctgagat ttaagtcgat cgagtttcca gatatatctc tcaagtagag 240 atggcttggt tcagtggcaa agtttctctg ggaggattcc cagatctcac tggcgctgtc aataaattcc agagagcgtt aaaaacattg aaaagaattt cgacaacgcc cttggcttcg 300 acqacaaqtc cgattctgcc gctgaaqatg cagcttcaag tatgtggcca cctgcagttg 360 ataccaaaag cctctttgat cccgttatgt ccttcatggg taacacctct gatgagaaac 420 ctgatacatt ggaaqactct gtgcgtacag aaaatccgtc tcaaattgaa caaaaagaag 480 540 aaqaaqctqq atcqqttaaq ctaqctactq aacaaqcaqt atctqttgaa gcaaataaag aaacaaacat gagaagagaa gctgatcaag cagataatcc tgaggtaaca gaaactgttg 600 ttttggatcc caacgatgat gaaccgcaat cgcagatact tctcgaagag tcctctgaat 660 attctcttca gactcctgaa tcctcaggtt acaagactag tcttcaacct aatgaaaagc 720 780 tggaaatgac agcttctcaa gattcacagc ccgagcaacc caagtcagag gctgaggaat cacagootga ggattotgaa gcaaaagagg ttactgtaga aaacaaagac actgttoact 840 cccctgtgtt agatggacag cataagatta cttatatgga tgagacaaca aatgaacaag 900 aaattctggg tgaaaatctg gaagggagaa cctcgtctaa aatttttgaa gtttcaccag 960 1020 atatcaatca tgtaaatagg atagagtccc ttgttgctca tccgtcttta atttttgagt 1080 ctgatggttc tccttacgag tcttctatac caaagagatc gtcgtcagat gaaatttcgg 1140 agagaattqt ggattttgtt tctcgtgaaa tagattcaag actggatact agtgagttaa atqaaaqcca qcqttcaaqc tctqcqacaa atqtttccqa ctctqctqat qttattctqq 1200 aattagagaa g
- (2) INFORMATION FOR SEQ ID NO:12:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 290 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..290
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481358
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:
- Met Trp Pro Pro Ala Val Asp Thr Lys Ser Leu Phe Asp Pro Val Met 1 5 10 15
- Ser Phe Met Gly Asn Thr Ser Asp Glu Lys Pro Asp Thr Leu Glu Asp 20 25 30
- Ser Val Arg Thr Glu Asn Pro Ser Gln Ile Glu Gln Lys Glu Glu Glu 35 40 45
- Ala Gly Ser Val Lys Leu Ala Thr Glu Gln Ala Val Ser Val Glu Ala 50 55 60
- Asn Lys Glu Thr Asn Met Arg Arg Glu Ala Asp Gln Ala Asp Asn Pro 65 70 75 80 Glu Val Thr Glu Thr Val Val Leu Asp Pro Asn Asp Asp Glu Pro Gln

90 85 Ser Gln Ile Leu Leu Glu Glu Ser Ser Glu Tyr Ser Leu Gln Thr Pro 100 105 110 Glu Ser Ser Gly Tyr Lys Thr Ser Leu Gln Pro Asn Glu Lys Leu Glu 120 ~ Met Thr Ala Ser Gln Asp Ser Gln Pro Glu Gln Pro Lys Ser Glu Ala 135 Glu Glu Ser Gln Pro Glu Asp Ser Glu Ala Lys Glu Val Thr Val Glu 155 150 Asn Lys Asp Thr Val His Ser Pro Val Leu Asp Gly Gln His Lys Ile 170 165 Thr Tyr Met Asp Glu Thr Thr Asn Glu Gln Glu Ile Leu Gly Glu Asn 185 Leu Glu Gly Arg Thr Ser Ser Lys Ile Phe Glu Val Ser Pro Asp Ile 200 Asn His Val Asn Arg Ile Glu Ser Leu Val Ala His Pro Ser Leu Ile 220 215 Phe Glu Ser Asp Gly Ser Pro Tyr Glu Ser Ser Ile Pro Lys Arg Ser 235 230 Ser Ser Asp Glu Ile Ser Glu Arg Ile Val Asp Phe Val Ser Arg Glu 245 250 Ile Asp Ser Arg Leu Asp Thr Ser Glu Leu Asn Glu Ser Gln Arg Ser 260 265 Ser Ser Ala Thr Asn Val Ser Asp Ser Ala Asp Val Ile Leu Glu Leu Glu Lys 290

- (2) INFORMATION FOR SEQ ID NO:13:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 275 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..275
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481359
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:
- Met Ser Phe Met Gly Asn Thr Ser Asp Glu Lys Pro Asp Thr Leu Glu
  1 5 10 15
- Asp Ser Val Arg Thr Glu Asn Pro Ser Gln Ile Glu Gln Lys Glu Glu 20 25 30
- Glu Ala Gly Ser Val Lys Leu Ala Thr Glu Gln Ala Val Ser Val Glu
  35 40 45
- Ala Asn Lys Glu Thr Asn Met Arg Arg Glu Ala Asp Gln Ala Asp Asn 50 55 60
- Pro Glu Val Thr Glu Thr Val Val Leu Asp Pro Asn Asp Asp Glu Pro 65 70 75 80
- Gln Ser Gln Ile Leu Leu Glu Glu Ser Ser Glu Tyr Ser Leu Gln Thr 85 90 95
- Pro Glu Ser Ser Gly Tyr Lys Thr Ser Leu Gln Pro Asn Glu Lys Leu 100 105 110
- Glu Met Thr Ala Ser Gln Asp Ser Gln Pro Glu Gln Pro Lys Ser Glu
  115 120 125
- Ala Glu Glu Ser Gln Pro Glu Asp Ser Glu Ala Lys Glu Val Thr Val
- Glu Asn Lys Asp Thr Val His Ser Pro Val Leu Asp Gly Gln His Lys 145 150 155 160

Ile Thr Tyr Met Asp Glu Thr Thr Asn Glu Gln Glu Ile Leu Gly Glu 170 Asn Leu Glu Gly Arg Thr Ser Ser Lys Ile Phe Glu Val Ser Pro Asp 185 Ile Asn His Val Asn Arg Ile Glu Ser Leu Val Ala His Pro Ser Leu 200 Ile Phe Glu Ser Asp Gly Ser Pro Tyr Glu Ser Ser Ile Pro Lys Arg 215 220

Ser Ser Ser Asp Glu Ile Ser Glu Arg Ile Val Asp Phe Val Ser Arg 230 235 Glu Ile Asp Ser Arg Leu Asp Thr Ser Glu Leu Asn Glu Ser Gln Arg

245 250 Ser Ser Ser Ala Thr Asn Val Ser Asp Ser Ala Asp Val Ile Leu Glu 260 265

Leu Glu Lys 275

- (2) INFORMATION FOR SEQ ID NO:14:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 272 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

100

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..272
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481360
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:
- Met Gly Asn Thr Ser Asp Glu Lys Pro Asp Thr Leu Glu Asp Ser Val 10

Arg Thr Glu Asn Pro Ser Gln Ile Glu Gln Lys Glu Glu Glu Ala Gly 25

Ser Val Lys Leu Ala Thr Glu Gln Ala Val Ser Val Glu Ala Asn Lys 40 Glu Thr Asn Met Arg Arg Glu Ala Asp Gln Ala Asp Asn Pro Glu Val

55 Thr Glu Thr Val Val Leu Asp Pro Asn Asp Glu Pro Gln Ser Gln

70 75 Ile Leu Leu Glu Glu Ser Ser Glu Tyr Ser Leu Gln Thr Pro Glu Ser

85 90 Ser Gly Tyr Lys Thr Ser Leu Gln Pro Asn Glu Lys Leu Glu Met Thr

105 Ala Ser Gln Asp Ser Gln Pro Glu Gln Pro Lys Ser Glu Ala Glu Glu

120 Ser Gln Pro Glu Asp Ser Glu Ala Lys Glu Val Thr Val Glu Asn Lys

135 140 Asp Thr Val His Ser Pro Val Leu Asp Gly Gln His Lys Ile Thr Tyr

150 155 Met Asp Glu Thr Thr Asn Glu Gln Glu Ile Leu Gly Glu Asn Leu Glu

165 170 Gly Arg Thr Ser Ser Lys Ile Phe Glu Val Ser Pro Asp Ile Asn His 185

Val Asn Arg Ile Glu Ser Leu Val Ala His Pro Ser Leu Ile Phe Glu 200

Ser Asp Gly Ser Pro Tyr Glu Ser Ser Ile Pro Lys Arg Ser Ser Ser 215 220

Asp Glu Ile Ser Glu Arg Ile Val Asp Phe Val Ser Arg Glu Ile Asp 230 235 Ser Arg Leu Asp Thr Ser Glu Leu Asn Glu Ser Gln Arg Ser Ser Ser

245 250 255
Ala Thr Asn Val Ser Asp Ser Ala Asp Val Ile Leu Glu Leu Glu Lys
260 265 270

- (2) INFORMATION FOR SEQ ID NO:15:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 592 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..592
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481372
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15: ctaatcgaaa aaaaagcgag aaagaaagac gaactgatca gcaatgggaa gcttaagggt gagcacagtt gttattgcag tagtggcttg tctctccatc ctcctcatat ctcctacaga 120 agtagatggg cgtttagtgt gtgacactcc agcgggtaca tgtacctcga gctctacttg 180 caatgaccaa tgcaatacat ggggcggcaa ttatagtgga ggcgaatgtg cagattcaag 240 300 ctttcctqqt ttaaqtatat gttattqctq ccattatqta qqqaqcaqtq ctqaaatqqa aagcatgtga ttgcagatga tagaaaacga cgtcgctttg tgtgcgtatg tgtgtgtttt 360 420 ttqctaatcq catqtttatq ctttcatttc acatcctatg ttttgagtgt ttgcctttgt 480 actttqttqt tqtqcttctq tttqttttgc qttgtcaagt atcaaataaa gttggagtgt gtttttaaca aatgatttt ttattattct tgttgtattt agctaattta ttttatttaa 540
- (2) INFORMATION FOR SEQ ID NO:16:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 amino acids

gagtgtttta tttttatcaa taataataat cataattgcg gtttgttgtg cg

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..47
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481373
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Leu Ile Glu Lys Lys Ala Arg Lys Lys Asp Glu Leu Ile Ser Asn Gly
1 10 15

Lys Leu Lys Gly Glu His Ser Cys Tyr Cys Ser Ser Gly Leu Ser Leu 20 25 30

His Pro Pro His Ile Ser Tyr Arg Ser Arg Trp Ala Phe Ser Val

- (2) INFORMATION FOR SEQ ID NO:17:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 88 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..88
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481374
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:
  Met Gly Ser Leu Arg Val Ser Thr Val Val Ile Ala Val Val Ala Cys

```
Leu Ser Ile Leu Leu Ile Ser Pro Thr Glu Val Asp Gly Arg Leu Val
                                 25
Cys Asp Thr Pro Ala Gly Thr Cys Thr Ser Ser Ser Thr Cys Asn Asp
                            40
Gln Cys Asn Thr Trp Gly Gly Asn Tyr Ser Gly Gly Glu Cys Ala Asp
Ser Ser Phe Pro Gly Leu Ser Ile Cys Tyr Cys Cys His Tyr Val Gly
                    70
Ser Ser Ala Glu Met Glu Ser Met
                85
(2) INFORMATION FOR SEO ID NO:18:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 46 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
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- (B) LOCATION: 1..46
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481375
- (2) INFORMATION FOR SEQ ID NO:19:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1135 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1135
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481388
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

taaatgagat gaatagaggt ccacgagcta agggtttcaa cagccaagat ggttccaagg 60 tgatggctgt gtctttgaag gagcagagag tgactgagac tgagaaactc agtgaagatg 120 tgtctctttt agatcccaag gactacaata agatagattt ccctgagacc tacacagaag 180 caaagtttta tgtaatcaaa tcgtacagtg aagatgatat tcataaaagt atcaaataca 240 gtgtttggtc cagcactcct aatggtaaca agaagctgga tgcctcatat aacgaggcaa 300 aacagaagtc agatggctgt cccgtgtttc tacttttctc tgtaaacact agtggacaat 360 ttgttggttt agccgagatg gtaggccctg ttgatttcaa taagactgtt gaatactggc 420 aacaggacaa atggattggt tgcttccctg ttaagtggca tttcgttaaa gatatcccta 480 atagctcctt gaggcatata actctggaga acaatgagaa caagccggtt actaatagca 540 gagacacaca ggaagtaaag ctcgagcaag gcattaaagt catcaagatt ttcaaggacc 600 acgcaagcaa gacatgcatc ctcgatgatt ttgagttcta tgagaatcgt caaaaqatta 660 tccaagaaag gaaaagcaaa cacctgcaga tcaaaaaaca gacattggtg gccaatgcag 720 acaaaggtgt aatgtcaaaa attaatcttg tgaaacctca agagtctact acagcctcag 780 aagatgcagc agcactagga gttgcggctg aagtgactaa agaatcgaaa gtggtgaaag 840 agaccgagtt acctgtggag aaaaatgctg ttgctactgc ctgctgaacc aacctttggt 900 tttaagtggg aactgagtgg gctgttttag gctatttaga gcgtttctct agttttgttt 960 ccattcctga atttgcagac ttttttttt tttttttgg aaccgagttg agagggtagt 1020 ggcttagtag atgaagtttt ggcatgagca ttcatcatct tgcagttatt ctctatccct ttagtaatgg tccaacatat gaggatatgg gtaaaagatt ggtattgaat cagct

- (2) INFORMATION FOR SEQ ID NO:20:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 294 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..294
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481389
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Asn Glu Met Asn Arg Gly Pro Arg Ala Lys Gly Phe Asn Ser Gln Asp

Gly Ser Lys Val Met Ala Val Ser Leu Lys Glu Gln Arg Val Thr Glu 20 25 30

Thr Glu Lys Leu Ser Glu Asp Val Ser Leu Leu Asp Pro Lys Asp Tyr 35 40 45

Asn Lys Ile Asp Phe Pro Glu Thr Tyr Thr Glu Ala Lys Phe Tyr Val 50 60

Ile Lys Ser Tyr Ser Glu Asp Asp Ile His Lys Ser Ile Lys Tyr Ser

65 70 75 80
Val Trp Ser Ser Thr Pro Asn Gly Asn Lys Lys Leu Asp Ala Ser Tyr

85 90 95 Asn Glu Ala Lys Gln Lys Ser Asp Gly Cys Pro Val Phe Leu Leu Phe

100 105 110 Ser Val Asn Thr Ser Gly Gln Phe Val Gly Leu Ala Glu Met Val Gly

115 120 125
Pro Val Asp Phe Asn Lys Thr Val Glu Tyr Trp Gln Gln Asp Lys Trp
130 135 140

Ile Gly Cys Phe Pro Val Lys Trp His Phe Val Lys Asp Ile Pro Asn

165 170 175 Thr Asn Ser Arg Asp Thr Gln Glu Val Lys Leu Glu Gln Gly Ile Lys

180 185 190

Val Ile Lys Ile Phe Lys Asp His Ala Ser Lys Thr Cys Ile Leu Asp
195 200 205

Asp Phe Glu Phe Tyr Glu Asn Arg Gln Lys Ile Ile Gln Glu Arg Lys 210 215 220

Ser Lys His Leu Gln Ile Lys Lys Gln Thr Leu Val Ala Asn Ala Asp 225 230 235 240

225 230 235 240 Lys Gly Val Met Ser Lys Ile Asn Leu Val Lys Pro Gln Glu Ser Thr 245 250 255

245 250 255

Thr Ala Ser Glu Asp Ala Ala Ala Leu Gly Val Ala Ala Glu Val Thr
260 265 270

Lys Glu Ser Lys Val Val Lys Glu Thr Glu Leu Pro Val Glu Lys Asn 275 280 285

Ala Val Ala Thr Ala Cys

- (2) INFORMATION FOR SEQ ID NO:21:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 292 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

(B) LOCATION: 1..292 (D) OTHER INFORMATION: / Ceres Seq. ID 1481390 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21: Met Asn Arg Gly Pro Arg Ala Lys Gly Phe Asn Ser Gln Asp Gly Ser 1.0 Lys Val Met Ala Val Ser Leu Lys Glu Gln Arg Val Thr Glu Thr Glu 2.5 Lys Leu Ser Glu Asp Val Ser Leu Leu Asp Pro Lys Asp Tyr Asn Lys 40 Ile Asp Phe Pro Glu Thr Tyr Thr Glu Ala Lys Phe Tyr Val Ile Lys 55 Ser Tyr Ser Glu Asp Asp Ile His Lys Ser Ile Lys Tyr Ser Val Trp 70 75 Ser Ser Thr Pro Asn Gly Asn Lys Lys Leu Asp Ala Ser Tyr Asn Glu 9.0

Ala Lys Gln Lys Ser Asp Gly Cys Pro Val Phe Leu Leu Phe Ser Val

100 105 110

Asn Thr Ser Gly Gln Phe Val Gly Leu Ala Glu Met Val Gly Pro Val

Asp Phe Asn Lys Thr Val Glu Tyr Trp Gln Gln Asp Lys Trp Ile Gly 130 135 140

Cys Phe Pro Val Lys Trp His Phe Val Lys Asp Ile Pro Asn Ser Ser 145 150 155 160

Leu Arg His Ile Thr Leu Glu Asn Asn Glu Asn Lys Pro Val Thr Asn 165 170 175

Ser Arg Asp Thr Gln Glu Val Lys Leu Glu Gln Gly Ile Lys Val Ile 180 185 190

Lys Ile Phe Lys Asp His Ala Ser Lys Thr Cys Ile Leu Asp Asp Phe
195
200
205

Glu Phe Tyr Glu Asn Arg Gln Lys Ile Ile Gln Glu Arg Lys Ser Lys
210
220
215
220

His Leu Gln Ile Lys Lys Gln Thr Leu Val Ala Asn Ala Asp Lys Gly 225 230 235 240 Val Met Ser Lys Ile Asn Leu Val Lys Pro Gln Glu Ser Thr Thr Ala

245 250 255 Ser Glu Asp Ala Ala Ala Leu Gly Val Ala Ala Glu Val Thr Lys Glu

260 265 270

Ser Lys Val Val Lys Glu Thr Glu Leu Pro Val Glu Lys Asn Ala Val
275 280 285

Ala Thr Ala Cys

290

- (2) INFORMATION FOR SEQ ID NO:22:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 274 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..274
    - (D) OTHER INFORMATION: / Cores Seq. ID 1481391
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Met Ala Val Ser Leu Lys Glu Gln Arg Val Thr Glu Thr Glu Lys Leu 1 5 10 15

Ser Glu Asp Val Ser Leu Leu Asp Pro Lys Asp Tyr Asn Lys Ile Asp 20 25 30

Phe Pro Glu Thr Tyr Thr Glu Ala Lys Phe Tyr Val Ile Lys Ser Tyr 35 40 45

Ser Glu Asp Asp Ile His Lys Ser Ile Lys Tyr Ser Val Trp Ser Ser 55 Thr Pro Asn Gly Asn Lys Lys Leu Asp Ala Ser Tyr Asn Glu Ala Lys 70 75 80 Gln Lys Ser Asp Gly Cys Pro Val Phe Leu Leu Phe Ser Val Asn Thr 90 Ser Gly Gln Phe Val Gly Leu Ala Glu Met Val Gly Pro Val Asp Phe 105 Asn Lys Thr Val Glu Tyr Trp Gln Gln Asp Lys Trp Ile Gly Cys Phe 120 Pro Val Lys Trp His Phe Val Lys Asp Ile Pro Asn Ser Ser Leu Arg 135 140 His Ile Thr Leu Glu Asn Asn Glu Asn Lys Pro Val Thr Asn Ser Arg 150 155 Asp Thr Gln Glu Val Lys Leu Glu Gln Gly Ile Lys Val Ile Lys Ile 170 165 Phe Lys Asp His Ala Ser Lys Thr Cys Ile Leu Asp Asp Phe Glu Phe 180 185 190 Tyr Glu Asn Arg Gln Lys Ile Ile Gln Glu Arg Lys Ser Lys His Leu 200 205 Gln Ile Lys Lys Gln Thr Leu Val Ala Asn Ala Asp Lys Gly Val Met 215 220 Ser Lys Ile Asn Leu Val Lys Pro Gln Glu Ser Thr Thr Ala Ser Glu 230 235 Asp Ala Ala Ala Leu Gly Val Ala Ala Glu Val Thr Lys Glu Ser Lys 245 250 Val Val Lys Glu Thr Glu Leu Pro Val Glu Lys Asn Ala Val Ala Thr 260 265 270 Ala Cys

- (2) INFORMATION FOR SEQ ID NO:23:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 796 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..796
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481423
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

catcctaatc gaaaaaaagc aaccaaacac ataaaagaga gatttaatac aaaagaaaga 60 120 gaaaaaagaa agatatggca ggactcatca acaagatcgg agacgcactc cacaggtcga aggcgaatat ctcaaagata tcagaaacgc caaggatttt acaatacaca gcgttgcgaa 180 gtggctcgat gcacagcttc cattgcatcc gcggttgaaa gctttcttta ggacaatttc 240 tccgaggcat tttaaaaacg gagattggaa tacaggtgga aactgtaaca acacggttcc 300 tttgtctaga ggcagcgaaa tcacagggga tgatggatcg atcgatgcaa cagttqaqaq 360 tgctgtgaac gggacaagga tcaagattct tgacataact gcactttctg agctaagaga 420 cgaagctcat atctcagggt ctaaactcaa accccgaaaa ccgaagaagg caagtaacgt 480 gacctcaact ccaacgatca acgattgctt gcattggtgc ttaccaggga tcccagatac 540 ttggaatgaa cttttcattg ctcagatttg aagtattcaa catcatcaca cacacaaagc 600 tagctcaatg gattggctct gttgattctt tgttatagaa aggttttttt ttcagattct 660 ttcttgggag aataacaaag tttcagttct taaaaatagg ttttagatgg tttgtcagta 720 aatgattcat ctgtaacaat cacaatctgg tttttaatta tacacgagaa cattgaaatt 780 gaaacaatct ttttcc

- (2) INFORMATION FOR SEQ ID NO:24:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 76 amino acids

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- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..76
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481424
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

His Pro Asn Arg Lys Lys Ala Thr Lys His Ile Lys Glu Arg Phe Asn
1 10 15

Thr Lys Glu Arg Glu Lys Arg Lys Ile Trp Gln Asp Ser Ser Thr Arg
20 25 30

Ser Glu Thr His Ser Thr Gly Arg Arg Ile Ser Gln Arg Tyr Gln
35 40 45

Lys Arg Gln Gly Phe Tyr Asn Thr Gln Arg Cys Glu Val Ala Arg Cys 50 60

Thr Ala Ser Ile Ala Ser Ala Val Glu Ser Phe Leu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:25:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..47
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481425
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Met Ala Gly Leu Ile Asn Lys Ile Gly Asp Ala Leu His Arg Ser Lys 1 10 15

Ala Asn Ile Ser Lys Ile Ser Glu Thr Pro Arg Ile Leu Gln Tyr Thr 20 25 30

Ala Leu Arg Ser Gly Ser Met His Ser Phe His Cys Ile Arg Gly 35 40 45

- (2) INFORMATION FOR SEQ ID NO:26:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 492 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..492
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481471
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

acttcgcctt gaatcgagtc ttcgacgagt ctccggctgc gagtttctct tgctccggca 60 aacagacctg tcattgcttc tctctccggc taactacaca gaagcatggt gtttggacaa 120 gtagtaatag gtcctccagg atcgggaaag accacttatt gcaatggaat gtctcagttc 180 240 ctctctctaa tgggcaggaa ggttgctatt gttaatctgg atcctgcaaa tgatgcatta ccttatgagt gtgctgtgaa tatagaagaa ttgatcaagt tagaagatgt tatgtcggaa 300 360 cactcgcttg gtcctaatgg aggtcttgta tattgtatgg agtacttgga gaaaaacatt gactggctgg aatctaaact aaagcctctt ctgaaggatc attacattct ctttgatttt 420 cctggccaag tggaattgtt cttcattcat gacagtacca agaatgttct sncgaagctg 480

attaaatcat tg
(2) INFORMATION FOR SEQ ID NO:27:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 129 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..129
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481472
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Met Val Phe Gly Gln Val Val Ile Gly Pro Pro Gly Ser Gly Lys Thr

Thr Tyr Cys Asn Gly Met Ser Gln Phe Leu Ser Leu Met Gly Arg Lys 20 25 30

Val Ala Ile Val Asn Leu Asp Pro Ala Asn Asp Ala Leu Pro Tyr Glu 35 40 45

Cys Ala Val Asn Ile Glu Glu Leu Ile Lys Leu Glu Asp Val Met Ser 50 55 60

Glu His Ser Leu Gly Pro Asn Gly Gly Leu Val Tyr Cys Met Glu Tyr 65 70 75 80

Leu Glu Lys Asn Ile Asp Trp Leu Glu Ser Lys Leu Lys Pro Leu Leu 85 90 95

Lys Asp His Tyr Ile Leu Phe Asp Phe Pro Gly Gln Val Glu Leu Phe 100 105 110

Phe Ile His Asp Ser Thr Lys Asn Val Xaa Xaa Lys Leu Ile Lys Ser 115 120 125

Leu

- (2) INFORMATION FOR SEQ ID NO:28:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 108 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..108
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481473
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Met Ser Gln Phe Leu Ser Leu Met Gly Arg Lys Val Ala Ile Val Asn
1 10 15

Leu Asp Pro Ala Asn Asp Ala Leu Pro Tyr Glu Cys Ala Val Asn Ile
20 25 30

Glu Glu Leu Ile Lys Leu Glu Asp Val Met Ser Glu His Ser Leu Gly

Pro Asn Gly Gly Leu Val Tyr Cys Met Glu Tyr Leu Glu Lys Asn Ile 50 60

Asp Trp Leu Glu Ser Lys Leu Lys Pro Leu Leu Lys Asp His Tyr Ile
65 70 75 80

Leu Phe Asp Phe Pro Gly Gln Val Glu Leu Phe Phe Ile His Asp Ser

Thr Lys Asn Val Xaa Xaa Lys Leu Ile Lys Ser Leu 100 105

- (2) INFORMATION FOR SEQ ID NO:29:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 101 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..101
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481474
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Met Gly Arg Lys Val Ala Ile Val Asn Leu Asp Pro Ala Asn Asp Ala 1 10 15

Leu Pro Tyr Glu Cys Ala Val Asn Ile Glu Glu Leu Ile Lys Leu Glu 20 25 30

Asp Val Met Ser Glu His Ser Leu Gly Pro Asn Gly Gly Leu Val Tyr 35 40 45

Cys Met Glu Tyr Leu Glu Lys Asn Ile Asp Trp Leu Glu Ser Lys Leu 50 55 60

Lys Pro Leu Leu Lys Asp His Tyr Ile Leu Phe Asp Phe Pro Gly Gln 70 75 80

Val Glu Leu Phe Phe Ile His Asp Ser Thr Lys Asn Val Xaa Xaa Lys 85 90 95

Leu Ile Lys Ser Leu

100

- (2) INFORMATION FOR SEQ ID NO:30:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1189 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1189
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481479
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:30: 60 cagctcacgg aggaaccagt gttgctcctc aaactccaaa cagaaaaggg agtgtacaca 120 tagctcgctc tcgctctgtg ccccttaacg acaaggaatt aagcctgaag ggaatggatt catttttcag agtaattcct tcgactcctc gtgttaagga aggagacgtt ttctcaaatg 180 catcagaggc tggtaatact gaaacaggtg atgctgatgg agaagacata cctgaggatg 240 300 aagcagtttg taggatttgt ttggtagagc tctgtgaagg aggagaaacc ttaaaaatgg 360 agtgtagttg caaaggcgaa cttgctcttg cccacaaaga ttgtgctctt aaatggttca ccataaaggg taacaagact tgtgaggtgt gtaaacaaga agttaagaac ttacctgtaa 420 cactettacg catecaaage ettegaaatt etggtgttee teagetagat gtetetgget 480 atagggtgtg gcaggaggta ccggttctag taatcatcag catgctcgct tacttctgct 540 tectegagea geteetggtt gagaatatgg gtacaggtge categetata teactgeegt 600 tttcttgtat tcttggtctt cttgcatcca tgaccgcatc aaccatggta atgagaagat 660 ttqtctggat ttacgcatct gtccagtttg cgttggtcgt tctcttcgcc catatatttt 720 780 actctgtggt gaagttgcaa ccagttctgt cagttcttct gtcaacattt gctggatttg gtgtatgcat atgcggaagt tcagtgatgg ttgagtttgt gagatggaga cgaagatggc 840 900 gagecagaag getagageaa cagetgaace atgetttgae tetgteacaa eegeegeaac cactggatcc aacaacctct ctgcatcatt caaatacctc atagagagcc aagaagtgga 960 1020 cagatgattt tacatttata cagtgtagtt tggttaatgt ttatgtaatg atttgtataa 1080 aagaaaaaga gaaagtgatc caaggaatgc ttaaagatyg ytccttttgt ttgttttaca 1140 tacacatttg tattgttgta agtttgtaac tttggtttgc tcaatctctg caaatgaaat gtttgtagca gtattggttt ctctgtataa taaaaagatt taaaattgt
- (2) INFORMATION FOR SEQ ID NO:31:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 313 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
  (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..313
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481480
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:
- Ala His Gly Gly Thr Ser Val Ala Pro Gln Thr Pro Asn Arg Lys Gly
  1 5 10 15
- Ser Val His Ile Ala Arg Ser Arg Ser Val Pro Leu Asn Asp Lys Glu 20 25 30
- Leu Ser Leu Lys Gly Met Asp Ser Phe Phe Arg Val Ile Pro Ser Thr 35 40 45
- Pro Arg Val Lys Glu Gly Asp Val Phe Ser Asn Ala Ser Glu Ala Gly
- Asn Thr Glu Thr Gly Asp Ala Asp Gly Glu Asp Ile Pro Glu Asp Glu
- Ala Val Cys Arg Ile Cys Leu Val Glu Leu Cys Glu Gly Gly Glu Thr
- Leu Lys Met Glu Cys Ser Cys Lys Gly Glu Leu Ala Leu Ala His Lys
- 100 105 110

  Asp Cys Ala Leu Lys Trp Phe Thr Ile Lys Gly Asn Lys Thr Cys Glu
- 115 120 125
- Val Cys Lys Gln Glu Val Lys Asn Leu Pro Val Thr Leu Leu Arg Ile 130 135 140
- Gln Ser Leu Arg Asn Ser Gly Val Pro Gln Leu Asp Val Ser Gly Tyr 145 150 155 160
- Arg Val Trp Gln Glu Val Pro Val Leu Val Ile Ile Ser Met Leu Ala 165 170 175
- Tyr Phe Cys Phe Leu Glu Gln Leu Leu Val Glu Asn Met Gly Thr Gly 180 185 190
- Ala Ile Ala Ile Ser Leu Pro Phe Ser Cys Ile Leu Gly Leu Leu Ala 195 200 205
- Ser Met Thr Ala Ser Thr Met Val Met Arg Arg Phe Val Trp Ile Tyr 210 215 220
- Ala Ser Val Gln Phe Ala Leu Val Val Leu Phe Ala His Ile Phe Tyr 225 230 235 240
- Ser Val Val Lys Leu Gln Pro Val Leu Ser Val Leu Leu Ser Thr Phe 245 250 255
- Ala Gly Phe Gly Val Cys Ile Cys Gly Ser Ser Val Met Val Glu Phe 260 265 270
- Val Arg Trp Arg Arg Trp Arg Ala Arg Arg Leu Glu Gln Gln Leu 275 280 285
- Asn His Ala Leu Thr Leu Ser Gln Pro Pro Gln Pro Leu Asp Pro Thr 290 295 300
- Thr Ser Leu His His Ser Asn Thr Ser 305 310
- (2) INFORMATION FOR SEQ ID NO:32:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 276 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..276
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481481
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Met Asp Ser Phe Phe Arg Val Ile Pro Ser Thr Pro Arg Val Lys Glu Gly Asp Val Phe Ser Asn Ala Ser Glu Ala Gly Asn Thr Glu Thr Gly Asp Ala Asp Gly Glu Asp Ile Pro Glu Asp Glu Ala Val Cys Arg Ile 40 Cys Leu Val Glu Leu Cys Glu Gly Glu Thr Leu Lys Met Glu Cys Ser Cys Lys Gly Glu Leu Ala Leu Ala His Lys Asp Cys Ala Leu Lys Trp Phe Thr Ile Lys Gly Asn Lys Thr Cys Glu Val Cys Lys Gln Glu 90 Val Lys Asn Leu Pro Val Thr Leu Leu Arg Ile Gln Ser Leu Arg Asn 105 Ser Gly Val Pro Gln Leu Asp Val Ser Gly Tyr Arg Val Trp Gln Glu 120 Val Pro Val Leu Val Ile Ile Ser Met Leu Ala Tyr Phe Cys Phe Leu 135 140 Glu Gln Leu Leu Val Glu Asn Met Gly Thr Gly Ala Ile Ala Ile Ser 155 150 Leu Pro Phe Ser Cys Ile Leu Gly Leu Leu Ala Ser Met Thr Ala Ser 170 Thr Met Val Met Arg Arg Phe Val Trp Ile Tyr Ala Ser Val Gln Phe 185 Ala Leu Val Val Leu Phe Ala His Ile Phe Tyr Ser Val Val Lys Leu 200 205 Gln Pro Val Leu Ser Val Leu Leu Ser Thr Phe Ala Gly Phe Gly Val 215 Cys Ile Cys Gly Ser Ser Val Met Val Glu Phe Val Arg Trp Arg Arg 235 230 Arg Trp Arg Ala Arg Arg Leu Glu Gln Gln Leu Asn His Ala Leu Thr 250 245 Leu Ser Gln Pro Pro Gln Pro Leu Asp Pro Thr Thr Ser Leu His His 260 265 Ser Asn Thr Ser

- (2) INFORMATION FOR SEQ ID NO:33:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 215 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

275

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..215
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481482
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Met Glu Cys Ser Cys Lys Gly Glu Leu Ala Leu Ala His Lys Asp Cys
1 10 15

Ala Leu Lys Trp Phe Thr Ile Lys Gly Asn Lys Thr Cys Glu Val Cys

Lys Gln Glu Val Lys Asn Leu Pro Val Thr Leu Leu Arg Ile Gln Ser 40 45

25

Leu Arg Asn Ser Gly Val Pro Gln Leu Asp Val Ser Gly Tyr Arg Val

Trp Gln Glu Val Pro Val Leu Val Ile Ile Ser Met Leu Ala Tyr Phe
65 70 75 80

Cys Phe Leu Glu Gln Leu Leu Val Glu Asn Met Gly Thr Gly Ala Ile

|  |            |            |            | 85         |            |            |            |            | 90         |            |            |            |            | 95         |            |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ala  | Ile        | Ser        | Leu<br>100 | Pro        | Phe        | Ser        | Cys        | Ile<br>105 | Leu        | Gly        | Leu        | Leu        | Ala<br>110 | Ser        | Met        |
| Thr  | Ala        | Ser<br>115 | Thr        | Met        | Val        | Met        | Arg<br>120 | Arg        | Phe        | Val        | Trp        | Ile<br>125 | Tyr        | Ala        | Ser        |
| Val  | Gln<br>130 | Phe        | Ala        | Leu        | Val        | Val<br>135 | Leu        | Phe        | Ala        | His        | Ile<br>140 | Phe        | Tyr        | Ser        | Val        |
| Val<br>145   | Lys        | Leu        | Gln        | Pro        | Val<br>150 | Leu        | Ser        | Val        | Leu        | Leu<br>155 | Ser        | Thr        | Phe        | Ala        | Gly<br>160 |
| Phe  | Gly        | Val        | Cys        | Ile<br>165 | Cys        | Gly        | Ser        | Ser        | Val<br>170 | Met        | Val        | Glu        | Phe        | Val<br>175 | Arg        |
| Trp  | Arg        | Arg        | Arg<br>180 | Trp        | Arg        | Ala        | Arg        | Arg<br>185 | Leu        | Glu        | Gln        | Gln        | Leu<br>190 | Asn        | His        |
| Ala  | Leu        | Thr<br>195 | Leu        | Ser        | Gln        | Pro        | Pro<br>200 | Gln        | Pro        | Leu        | Asp        | Pro<br>205 | Thr        | Thr        | Ser        |
| Leu  | His<br>210 | His        | Ser        | Asn        | Thr        | Ser<br>215 |            |            |            |            |            |            |            |            |            |
| (2) INFORMATION FOR SEQ ID NO:34: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 643 base pairs |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..643
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481483
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:34: ataattcgag ctgtttttt gctgtaataa tttcacaatt ctctttttt ttcgctttta 60 aataattttg tctctccatc ttcttctctt ttgctagtct ctcatatcag ctaagaaaag 120 aaattcagaa caaaaaaata acacaaagct ctgtgtttct gtctatctgt tgaatcaaat 180 catatggaag acgatcgaaa agagaagaac actccgtggc tatcagtgcc acagtttggt 240 gattgggacc aaaaaggagg aggaacaatg cctgattact ctatggattt cactaagatt 300 agagagatga ggaaacaaaa caagagagac ccttctcgag ccagtttagg caatgaggaa 360 gageteatta ageeaceega gteageaaca teaactgetg agettaceac ggteeaaagt 420 gaaaaccgac gagagttctc tcccagccac catcatcaac cacattctcc ttctacgagg 480 agaagtatgt tcagctgctt caactgctgc gttaaagctt gaagatttct tcttgagcaa 540 agtagcagtt ttattattga cttgtgattt gaatgtggaa atgtgttaat gtcatgacac 600 tttaatatat gttccaatcc atttttcttt ttctttggga acc
- (2) INFORMATION FOR SEQ ID NO:35:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 112 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..112
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481484
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:
- Gln Phe Gly Asp Trp Asp Gln Lys Gly Gly Gly Thr Met Pro Asp Tyr 20 25 30
- Ser Met Asp Phe Thr Lys Ile Arg Glu Met Arg Lys Gln Asn Lys Arg 35 40 45
- Asp Pro Ser Arg Ala Ser Leu Gly Asn Glu Glu Leu Ile Lys Pro

#### (2) INFORMATION FOR SEQ ID NO:36:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 84 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..84
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481485
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:
- Met Pro Asp Tyr Ser Met Asp Phe Thr Lys Ile Arg Glu Met Arg Lys 1 5 10 15
- Gln Asn Lys Arg Asp Pro Ser Arg Ala Ser Leu Gly Asn Glu Glu Glu 20 25 30
- Leu Ile Lys Pro Pro Glu Ser Ala Thr Ser Thr Ala Glu Leu Thr Thr  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Val Gln Ser Glu Asn Arg Arg Glu Phe Ser Pro Ser His His Gln 50 55 60
- Pro His Ser Pro Ser Thr Arg Arg Ser Met Phe Ser Cys Phe Asn Cys 65 70 75 80

Cys Val Lys Ala

#### (2) INFORMATION FOR SEQ ID NO:37:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 79 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..79
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481486
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:
- Met Asp Phe Thr Lys Ile Arg Glu Met Arg Lys Gln Asn Lys Arg Asp 1 5 10 15
- Pro Ser Arg Ala Ser Leu Gly Asn Glu Glu Glu Leu Ile Lys Pro Pro 20 25 30
- Glu Ser Ala Thr Ser Thr Ala Glu Leu Thr Thr Val Gln Ser Glu Asn  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Arg Arg Glu Phe Ser Pro Ser His His His Gln Pro His Ser Pro Ser 50 60
- Thr Arg Arg Ser Met Phe Ser Cys Phe Asn Cys Cys Val Lys Ala
  65 70 75
- (2) INFORMATION FOR SEQ ID NO:38:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 760 base pairs
    - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..760
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481487
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:38: gcmccmbtyy cattayytag aacatcctaw hraaaaaaca aaagtgatca gttttgtttt 60 ctcggggaaa ttttctgaaa gtgaagaaag ggaaagcaag tttttttga agtggggaga 120 gagatgggag aaatggggaa ggcgatggga ttgctgatta gcgggacgct tgtgtattac 180 cattgtgcat atcgtaacgc gactcttctc tctctcttct ccgatgtttt cattgttctc 240 ttatgctctc tcgccattct cggtctcctt tttcgccaac tcaatgtctc ggtaccagtg 300 gatccactag agtggcaaat atcacaggac acagcaagta acatcgttgc acgcttagct 360 aataccgttg gagcagcaga gggtgttctg agggttgcag caactggaca tgacaagaga 420 ctttttgtca aggtcgtaat ttgcctttac ttcttatcag cgcttgggcg actcatatca 480 ggygtaaccg ttgcttatgc aggactatgc ttgttctgtc tctccatgct ctgtcagact 540 tctcaatctc ttggaaactg tgtactaaag cgaggaaatg gccagatttt agaacaagaa 600 gcacattctg atacataata tgtctagctt ttgtttatac ttttcgtctt ttctcatgct 660 tacatgctca tagcttcagt cttcagagta gtttcccctt atgtacattg gatttgttgc 720
- (2) INFORMATION FOR SEQ ID NO:39:
  - (i) SEQUENCE CHARACTERISTICS:

atactacctt gtgaaaaatg taatgatatt gtttaacctc

- (A) LENGTH: 164 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..164
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481488
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:39: Met Gly Glu Met Gly Lys Ala Met Gly Leu Leu Ile Ser Gly Thr Leu
- 1 5 10 15 Val Tyr Tyr His Cys Ala Tyr Arg Asn Ala Thr Leu Leu Ser Leu Phe
- 20 25 30
  Ser Asp Val Phe Ile Val Leu Cys Ser Leu Ala Ile Leu Gly Leu
  35 40 45
- Leu Phe Arg Gln Leu Asn Val Ser Val Pro Val Asp Pro Leu Glu Trp
  50 55 60
- Gln Ile Ser Gln Asp Thr Ala Ser Asn Ile Val Ala Arg Leu Ala Asn 65 70 75 80
- Thr Val Gly Ala Ala Glu Gly Val Leu Arg Val Ala Ala Thr Gly His
- Asp Lys Arg Leu Phe Val Lys Val Val Ile Cys Leu Tyr Phe Leu Ser 100 105 110
- Ala Leu Gly Arg Leu Ile Ser Xaa Val Thr Val Ala Tyr Ala Gly Leu 115 120 125
- Cys Leu Phe Cys Leu Ser Met Leu Cys Gln Thr Ser Gln Ser Leu Gly 130 135 140
- His Ser Asp Thr
- (2) INFORMATION FOR SEQ ID NO:40:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 161 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..161
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481489
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:
- Met Gly Lys Ala Met Gly Leu Leu Ile Ser Gly Thr Leu Val Tyr Tyr 1 5 10 15
- His Cys Ala Tyr Arg Asn Ala Thr Leu Leu Ser Leu Phe Ser Asp Val 20 25 30
- Phe Ile Val Leu Cys Ser Leu Ala Ile Leu Gly Leu Leu Phe Arg
  35 40 45
- Gln Leu Asn Val Ser Val Pro Val Asp Pro Leu Glu Trp Gln Ile Ser 50 55 60
- Gln Asp Thr Ala Ser Asn Ile Val Ala Arg Leu Ala Asn Thr Val Gly 65 70 75 80
- Ala Ala Glu Gly Val Leu Arg Val Ala Ala Thr Gly His Asp Lys Arg
- Leu Phe Val Lys Val Val Ile Cys Leu Tyr Phe Leu Ser Ala Leu Gly
  100 105 110
- Arg Leu Ile Ser Xaa Val Thr Val Ala Tyr Ala Gly Leu Cys Leu Phe
  115 120 125
- Cys Leu Ser Met Leu Cys Gln Thr Ser Gln Ser Leu Gly Asn Cys Val
- Leu Lys Arg Gly Asn Gly Gln Ile Leu Glu Gln Glu Ala His Ser Asp 145 150 155 160
- (2) INFORMATION FOR SEQ ID NO:41:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 157 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..157
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481490
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:
- Met Gly Leu Leu Ile Ser Gly Thr Leu Val Tyr Tyr His Cys Ala Tyr 1 5 10 15
- Arg Asn Ala Thr Leu Leu Ser Leu Phe Ser Asp Val Phe Ile Val Leu
  20 25 30
- Leu Cys Ser Leu Ala Ile Leu Gly Leu Leu Phe Arg Gln Leu Asn Val 35 40 45
- Ser Val Pro Val Asp Pro Leu Glu Trp Gln Ile Ser Gln Asp Thr Ala
- 50 55 60
  Ser Asn Ile Val Ala Arg Leu Ala Asn Thr Val Gly Ala Ala Glu Gly
- 65 70 75 80 Val Leu Arg Val Ala Ala Thr Gly His Asp Lys Arg Leu Phe Val Lys
- 85 90 95
  Val Val Ile Cys Leu Tyr Phe Leu Ser Ala Leu Gly Arg Leu Ile Ser
  100 105 110
- Xaa Val Thr Val Ala Tyr Ala Gly Leu Cys Leu Phe Cys Leu Ser Met 115 120 125
- Leu Cys Gln Thr Ser Gln Ser Leu Gly Asn Cys Val Leu Lys Arg Gly

130 135 140
Asn Gly Gln Ile Leu Glu Gln Glu Ala His Ser Asp Thr
145 150 155
(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 661 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..661
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481491
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

mcacaaaaya actaaaaaac aatcagatct gagatcgaac aaaacaacat gaacacgtta 60 atcccatcgg agaaaagatg gatcatcacc ggcgttttac tagccggttt agttggcggt 120 gctttgcttt tcacaagctt catacgagcc gctgacgaaa cgctcttcct ctgttccaca 180 gcaagcgcca aaagcagagc ggtggctgcg gcagctgatt acgaagcgac tccgattcag 240 cttcaagcga tcgtccacta cgcgacatct aacgttgtcc cacaacagaa tcttgctgag 300 atctcgatct ctttcaacat cttgaaaaag ctagctccgg ctaactttct cgtgttcggt 360 ctcggtcgtg actcgctcat gtgggcttct ttaaatccac gtggcaaaac cttgttcttg 420 gaagaagatc ttgaatggtt tcagaaagtg accaaagact ctcctttctt acgtgcgcat 480 cacgtgcgtt acaggacgca gcttcaacaa gccgattcgc ttctacgttc gtacaaaacq 540 gagcctaact gttttccggc gaaatcttat ctccggggaa acqagaagtg taagctagct 600 ctcacgggac tgcccgatga gttctacgat acagagtggg atctgctgat ggtcgatgct 660

- (2) INFORMATION FOR SEQ ID NO:43:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 204 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..204
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481492
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

Met Asn Thr Leu Ile Pro Ser Glu Lys Arg Trp Ile Ile Thr Gly Val 1 5 10 15

Leu Leu Ala Gly Leu Val Gly Gly Ala Leu Leu Phe Thr Ser Phe Ile  $20 \hspace{1.5cm} 25 \hspace{1.5cm} 30$ 

Arg Ala Ala Asp Glu Thr Leu Phe Leu Cys Ser Thr Ala Ser Ala Lys 35 40 45

Ser Arg Ala Val Ala Ala Ala Asp Tyr Glu Ala Thr Pro Ile Gln
50 55 60

Leu Gln Ala Ile Val His Tyr Ala Thr Ser Asn Val Val Pro Gln Gln 65 70 75 80 Asn Leu Ala Glu Ile Ser Ile Ser Phe Asn Ile Leu Lys Lys Leu Ala

85 90 95
Pro Ala Asn Phe Leu Val Phe Gly Leu Gly Arg Asp Ser Leu Met Trp

100 100 110 Ala Ser Leu Asp Pro Arg Cly Lys Thr Leu Phe Leu Cly Cly Asp Lou

Ala Ser Leu Asn Pro Arg Gly Lys Thr Leu Phe Leu Glu Glu Asp Leu 115 120 125

Glu Trp Phe Gln Lys Val Thr Lys Asp Ser Pro Phe Leu Arg Ala His 130 135 140

His Val Arg Tyr Arg Thr Gln Leu Gln Gln Ala Asp Ser Leu Leu Arg 145 150 155 160

1140

Ser Tyr Lys Thr Glu Pro Asn Cys Phe Pro Ala Lys Ser Tyr Leu Arg

Gly Asn Glu Lys Cys Lys Leu Ala Leu Thr Gly Leu Pro Asp Glu Phe 180 185 190

Tyr Asp Thr Glu Trp Asp Leu Leu Met Val Asp Ala 195 200

- (2) INFORMATION FOR SEQ ID NO:44:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1163 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1163
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481504
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:44: 60 aatgctcgta agttcaagca aaatcacaag agcgagagag atggtgacga aaacagagga 120 gaagcaattg aaccagctag agattcaagt cgataatggc ggaggtggaa catgggagta tctttqtctc gttcgtaatc tcaaacttcg tcggtcggag aaagtattaa aacacggttc 180 ctcqattttq aatqatccqa qqaaacqatc tqctctcggt ccatatgaat ggacactaaa 240 tgagcaggtg gcaattgcag ctatggactg tcaatgtctc ggtgtcgcac agagttgcat 300 taaggctttg cagaagaaat ttcctgggag caaaagggtt gggaggcttg aggcattgct 360 420 tcttqaaqca aaqqqattat gggqaqaqgc tgaggaagca tatgcqagtc ttttggaaga 480 taatccactc gaccaagcga tacacaaacg aagagtggct atatccaagg cactaggaaa 540 accttccata gccattgagc ttcttaacaa atatcttgaa ctattcatgg ctgatcatga 600 tgcatggaga gaacttgcag agctttatct ttccttgcaa atgtataagc aagcagcttt ctgctatgaa gagctcatac tatctcagcc tactgttcca ttgtaccacc tcgcatatgc 660 tgaggttctc tatacaatcg gtggagtaga aaacattatc tcagcaagaa aatactatgc 720 agcgaccgta gatttaacag gcggcaaaaa cactagagct cttctcggaa tctgcttgtg 780 tgcatcggcc attgcacagc tctcaaaagg caggaacaaa gaggacaaag acgctacggc 840 900 agccccagag cttcattccc tggctgcagc tgcagtagag aaagaataca agcaaaaagc 960 cccqqacaaa cttcaqctca tctcttccgc gttaagaatc ttgaagactt gatcgcaagt aaacqatqtt ctqqcccaca aqacqcaaac gacttaqcaq tagtaqataq tcqqaaaata 1020 tcgaactcta aattcaaata actttcttta aagtttaaac caaagagaat tttgattact 1080
- (2) INFORMATION FOR SEQ ID NO:45:

gacgtgcagc ttcttttgta tcg

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 316 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..316
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481505

gttagatacc aaaaccaaat aactgtatca ctccttagcc tttacggttt ccatgcttgc

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Lys Thr Glu Glu Lys Gln Leu Asn Gln Leu Glu Ile Gln Val Asp Asn 20 25 30

Gly Gly Gly Thr Trp Glu Tyr Leu Cys Leu Val Arg Asn Leu Lys 35 40 45

Leu Arg Arg Ser Glu Lys Val Leu Lys His Gly Ser Ser Ile Leu Asn 50 55 60

Asp Pro Arg Lys Arg Ser Ala Leu Gly Pro Tyr Glu Trp Thr Leu Asn

65 Glu Gln Val Ala Ile Ala Ala Met Asp Cys Gln Cys Leu Gly Val Ala 90 85 Gln Ser Cys Ile Lys Ala Leu Gln Lys Lys Phe Pro Gly Ser Lys Arg 105 Val Gly Arg Leu Glu Ala Leu Leu Glu Ala Lys Gly Leu Trp Gly 120 Glu Ala Glu Glu Ala Tyr Ala Ser Leu Leu Glu Asp Asn Pro Leu Asp 140 135 Gln Ala Ile His Lys Arg Arg Val Ala Ile Ser Lys Ala Leu Gly Lys 155 150 Pro Ser Ile Ala Ile Glu Leu Leu Asn Lys Tyr Leu Glu Leu Phe Met 165 170 Ala Asp His Asp Ala Trp Arg Glu Leu Ala Glu Leu Tyr Leu Ser Leu 185 Gln Met Tyr Lys Gln Ala Ala Phe Cys Tyr Glu Glu Leu Ile Leu Ser 200 195 Gln Pro Thr Val Pro Leu Tyr His Leu Ala Tyr Ala Glu Val Leu Tyr 215 220 Thr Ile Gly Gly Val Glu Asn Ile Ile Ser Ala Arg Lys Tyr Tyr Ala 230 235 Ala Thr Val Asp Leu Thr Gly Gly Lys Asn Thr Arg Ala Leu Leu Gly 245 250 Ile Cys Leu Cys Ala Ser Ala Ile Ala Gln Leu Ser Lys Gly Arg Asn 260 265 270 Lys Glu Asp Lys Asp Ala Thr Ala Ala Pro Glu Leu His Ser Leu Ala 280 285 Ala Ala Ala Val Glu Lys Glu Tyr Lys Gln Lys Ala Pro Asp Lys Leu 295 Gln Leu Ile Ser Ser Ala Leu Arg Ile Leu Lys Thr 310

- (2) INFORMATION FOR SEQ ID NO:46:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 316 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..316
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481506
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:
- Met Leu Val Ser Ser Lys Ile Thr Arg Ala Arg Glu Met Val Thr
- Lys Thr Glu Glu Lys Gln Leu Asn Gln Leu Glu Ile Gln Val Asp Asn
  20 25 30
- Gly Gly Gly Thr Trp Glu Tyr Leu Cys Leu Val Arg Asn Leu Lys
  35 40 45
- Leu Arg Arg Ser Glu Lys Val Leu Lys His Gly Ser Ser Ile Leu Asn 50 55 60
- Asp Pro Arg Lys Arg Ser Ala Leu Gly Pro Tyr Glu Trp Thr Leu Asn 65 70 75 80
- Glu Gln Val Ala Ile Ala Ala Met Asp Cys Gln Cys Leu Gly Val Ala 85 90 95
- Gln Ser Cys Ile Lys Ala Leu Gln Lys Lys Phe Pro Gly Ser Lys Arg 100 105 110
- Val Gly Arg Leu Glu Ala Leu Leu Glu Ala Lys Gly Leu Trp Gly
  115 120 125

Glu Ala Glu Glu Ala Tyr Ala Ser Leu Leu Glu Asp Asn Pro Leu Asp 135 Gln Ala Ile His Lys Arg Arg Val Ala Ile Ser Lys Ala Leu Gly Lys 150 155 Pro Ser Ile Ala Ile Glu Leu Leu Asn Lys Tyr Leu Glu Leu Phe Met 170 165 Ala Asp His Asp Ala Trp Arg Glu Leu Ala Glu Leu Tyr Leu Ser Leu 185 Gln Met Tyr Lys Gln Ala Ala Phe Cys Tyr Glu Glu Leu Ile Leu Ser 200 Gln Pro Thr Val Pro Leu Tyr His Leu Ala Tyr Ala Glu Val Leu Tyr 220 215 Thr Ile Gly Gly Val Glu Asn Ile Ile Ser Ala Arg Lys Tyr Tyr Ala 230 235 Ala Thr Val Asp Leu Thr Gly Gly Lys Asn Thr Arg Ala Leu Leu Gly 245 250 Ile Cys Leu Cys Ala Ser Ala Ile Ala Gln Leu Ser Lys Gly Arg Asn 265 270 Lys Glu Asp Lys Asp Ala Thr Ala Ala Pro Glu Leu His Ser Leu Ala 280 285 Ala Ala Ala Val Glu Lys Glu Tyr Lys Gln Lys Ala Pro Asp Lys Leu 295 300 Gln Leu Ile Ser Ser Ala Leu Arg Ile Leu Lys Thr 310

- (2) INFORMATION FOR SEQ ID NO:47:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 303 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..303
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481507
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

Met Val Thr Lys Thr Glu Glu Lys Gln Leu Asn Gln Leu Glu Ile Gln

1 10 15

10 15

Val Asp Asn Gly Gly Gly Gly Thr Trp Glu Tyr Leu Cys Leu Val Arg 20 25 30

Asn Leu Lys Leu Arg Arg Ser Glu Lys Val Leu Lys His Gly Ser Ser 35 40 45

Ile Leu Asn Asp Pro Arg Lys Arg Ser Ala Leu Gly Pro Tyr Glu Trp 50 55 60

Thr Leu Asn Glu Gln Val Ala Ile Ala Ala Met Asp Cys Gln Cys Leu 65 70 75 80

Gly Val Ala Gln Ser Cys Ile Lys Ala Leu Gln Lys Lys Phe Pro Gly 85 90 95

Ser Lys Arg Val Gly Arg Leu Glu Ala Leu Leu Glu Ala Lys Gly
100 105 110

Leu Trp Gly Glu Ala Glu Glu Ala Tyr Ala Ser Leu Leu Glu Asp Asn 115 120 125

Pro Leu Asp Gln Ala Ile His Lys Arg Arg Val Ala Ile Ser Lys Ala 130 135 140

Leu Gly Lys Pro Ser Ile Ala Ile Glu Leu Leu Asn Lys Tyr Leu Glu 145 150 155 160

Leu Phe Met Ala Asp His Asp Ala Trp Arg Glu Leu Ala Glu Leu Tyr
165 170 175

Leu Ser Leu Gln Met Tyr Lys Gln Ala Ala Phe Cys Tyr Glu Glu Leu

180 185 190

Ile Leu Ser Gln Pro Thr Val Pro Leu Tyr His Leu Ala Tyr Ala Glu
195 200 205

Val Leu Tyr Thr Ile Gly Gly Val Glu Asn Ile Ile Ser Ala Arg Lys
210 215 220

Tyr Tyr Ala Ala Thr Val Asp Leu Thr Gly Gly Lys Asn Thr Arg Ala 225 230 235 240

Leu Leu Gly Ile Cys Leu Cys Ala Ser Ala Ile Ala Gln Leu Ser Lys 245 250 255

Gly Arg Asn Lys Glu Asp Lys Asp Ala Thr Ala Ala Pro Glu Leu His 260 265 270

Ser Leu Ala Ala Ala Ala Val Glu Lys Glu Tyr Lys Gln Lys Ala Pro 275 280 285

Asp Lys Leu Gln Leu Ile Ser Ser Ala Leu Arg Ile Leu Lys Thr 290 295 300

- (2) INFORMATION FOR SEQ ID NO:48:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1259 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1259
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481516
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:48: 60 catgatttct taagctcgca gcataatcga tggcgaattt gagtttgagc ttgtatctaa 120 180 tcctccggat ttacgctctt ttgttgctgt tcaatgtctc cttcgctaaa acacttaaac gagacatgaa agctttgaat gagataaaga aattggtggg atggagattg gtatactctt 240 gggttggaga tgatccttgt ggcgatggag ttttgcctcc gtggtctgga gttacttgct 300 360 ctaaagttgg cgattatcgt gtcgtcgtca agctagaagt gtattcaatg tcgatagttg ggaatttccc aaaggctata acgaagctct tagatctcac tgttttggat atgcataata 420 480 acaaattaac aggtcctatt cctccagaaa ttgggcggct taagcggctt atcacactga 540 atttgaggtg gaacaaactt caacaggcac tgcctcctga aattggtgga ttgaagagtc 600 taacttatct gtacctgagt tttaacaatt tcaaaggaga aatccccaaa gaacttgcaa 660 atctccatga gctccagtac ttacatattc aggagaatca ttttactggg cgaattccag cagagetggg aacattacaa aaacttegee aettggatge tggeaacaat aacttagtgg 720 780 ggagtataag cgatcttttt cgcattgaag gatgctttcc agctcttaga aacctgtttt taaacaataa ttacttgact ggaggactcc caaacaagct tgcaaatcta acaaacctgg 840 agatettgta ettatettte aacaaaatga etggageaat accegetgea ettgeeagta 900 taccaagact aactaacttg cacttggacc acaatctatt caatggaagt atacctgaag 960 ccttctacaa gcatccaaac ctaaaagata tgtacataga agggaatgct ttcaaatcag 1020 acgtgaaggc gattggtgca cataaggtcc tcgaactttc tgacacagac ttccttgttt 1080 agttatgtat agcacaactt tgtttcattt acagatagga atttggcagt gttatctggt 1140 tatttaagat tcattttctc tgttaaagcg agattgtagt tgatgtgttt tctgaatgta 1200 aaagattcct tatccatgta tgaaaattga atataaaggg aatctggttt gttctttcc
- (2) INFORMATION FOR SEQ ID NO:49:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 330 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..330
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481517

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49: Met Ala Asn Leu Ser Leu Ser Leu Tyr Leu Ile Leu Arg Ile Tyr Ala Leu Leu Leu Leu Phe Asn Val Ser Phe Ala Lys Thr Leu Lys Arg Asp 25 Met Lys Ala Leu Asn Glu Ile Lys Lys Leu Val Gly Trp Arg Leu Val 40 Tyr Ser Trp Val Gly Asp Asp Pro Cys Gly Asp Gly Val Leu Pro Pro Trp Ser Gly Val Thr Cys Ser Lys Val Gly Asp Tyr Arg Val Val Val 75 70 Lys Leu Glu Val Tyr Ser Met Ser Ile Val Gly Asn Phe Pro Lys Ala 90 85 Ile Thr Lys Leu Leu Asp Leu Thr Val Leu Asp Met His Asn Asn Lys 105 Leu Thr Gly Pro Ile Pro Pro Glu Ile Gly Arg Leu Lys Arg Leu Ile 115 120 Thr Leu Asn Leu Arg Trp Asn Lys Leu Gln Gln Ala Leu Pro Pro Glu 140 135 Ile Gly Gly Leu Lys Ser Leu Thr Tyr Leu Tyr Leu Ser Phe Asn Asn 150 155 Phe Lys Gly Glu Ile Pro Lys Glu Leu Ala Asn Leu His Glu Leu Gln 170 165 Tyr Leu His Ile Gln Glu Asn His Phe Thr Gly Arg Ile Pro Ala Glu 185 Leu Gly Thr Leu Gln Lys Leu Arg His Leu Asp Ala Gly Asn Asn Asn 205 200 Leu Val Gly Ser Ile Ser Asp Leu Phe Arg Ile Glu Gly Cys Phe Pro 220 215 Ala Leu Arg Asn Leu Phe Leu Asn Asn Asn Tyr Leu Thr Gly Gly Leu 225 230 235 Pro Asn Lys Leu Ala Asn Leu Thr Asn Leu Glu Ile Leu Tyr Leu Ser 245 250 Phe Asn Lys Met Thr Gly Ala Ile Pro Ala Ala Leu Ala Ser Ile Pro 265 270 Arg Leu Thr Asn Leu His Leu Asp His Asn Leu Phe Asn Gly Ser Ile 280 Pro Glu Ala Phe Tyr Lys His Pro Asn Leu Lys Asp Met Tyr Ile Glu 295 300 Gly Asn Ala Phe Lys Ser Asp Val Lys Ala Ile Gly Ala His Lys Val 310 315 Leu Glu Leu Ser Asp Thr Asp Phe Leu Val

- 325
  (2) INFORMATION FOR SEQ ID NO:50:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 298 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..298
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481518
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:
- Met Lys Ala Leu Asn Glu Ile Lys Lys Leu Val Gly Trp Arg Leu Val 1 5 10 15
- Tyr Ser Trp Val Gly Asp Asp Pro Cys Gly Asp Gly Val Leu Pro Pro

Trp Ser Gly Val Thr Cys Ser Lys Val Gly Asp Tyr Arg Val Val Val 40 Lys Leu Glu Val Tyr Ser Met Ser Ile Val Gly Asn Phe Pro Lys Ala 55 Ile Thr Lys Leu Leu Asp Leu Thr Val Leu Asp Met His Asn Asn Lys 70 75 Leu Thr Gly Pro Ile Pro Pro Glu Ile Gly Arg Leu Lys Arg Leu Ile 90 85 Thr Leu Asn Leu Arg Trp Asn Lys Leu Gln Gln Ala Leu Pro Pro Glu 105 Ile Gly Gly Leu Lys Ser Leu Thr Tyr Leu Tyr Leu Ser Phe Asn Asn 120 Phe Lys Gly Glu Ile Pro Lys Glu Leu Ala Asn Leu His Glu Leu Gln 135 Tyr Leu His Ile Gln Glu Asn His Phe Thr Gly Arg Ile Pro Ala Glu Leu Gly Thr Leu Gln Lys Leu Arg His Leu Asp Ala Gly Asn Asn Asn 170 Leu Val Gly Ser Ile Ser Asp Leu Phe Arg Ile Glu Gly Cys Phe Pro 185 Ala Leu Arg Asn Leu Phe Leu Asn Asn Tyr Leu Thr Gly Gly Leu 200 Pro Asn Lys Leu Ala Asn Leu Thr Asn Leu Glu Ile Leu Tyr Leu Ser 215 Phe Asn Lys Met Thr Gly Ala Ile Pro Ala Ala Leu Ala Ser Ile Pro 230 235 Arg Leu Thr Asn Leu His Leu Asp His Asn Leu Phe Asn Gly Ser Ile 250 245 Pro Glu Ala Phe Tyr Lys His Pro Asn Leu Lys Asp Met Tyr Ile Glu 260 265 270 Gly Asn Ala Phe Lys Ser Asp Val Lys Ala Ile Gly Ala His Lys Val 280 275 Leu Glu Leu Ser Asp Thr Asp Phe Leu Val 290 295 (2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 244 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..244
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481519
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:
- Met Ser Ile Val Gly Asn Phe Pro Lys Ala Ile Thr Lys Leu Leu Asp 1 10 15
- Leu Thr Val Leu Asp Met His Asn Asn Lys Leu Thr Gly Pro Ile Pro 20 25 30
- Pro Glu Ile Gly Arg Leu Lys Arg Leu Ile Thr Leu Asn Leu Arg Trp  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Asn Lys Leu Gln Gln Ala Leu Pro Pro Glu Ile Gly Gly Leu Lys Ser 50 55 60
- Leu Thr Tyr Leu Tyr Leu Ser Phe Asn Asn Phe Lys Gly Glu Ile Pro 65 70 75 80
- Lys Glu Leu Ala Asn Leu His Glu Leu Gln Tyr Leu His Ile Gln Glu 85 90 95
- Asn His Phe Thr Gly Arg Ile Pro Ala Glu Leu Gly Thr Leu Gln Lys

|            |            |            | 100        |     |            |            |            | 105 |     |            |            |            | 110 |     |            |
|------------|------------|------------|------------|-----|------------|------------|------------|-----|-----|------------|------------|------------|-----|-----|------------|
| Leu        | Arg        | His<br>115 | Leu        | Asp | Ala        | Gly        | Asn<br>120 | Asn | Asn | Leu        | Val        | Gly<br>125 | Ser | Ile | Ser        |
| Asp        | Leu<br>130 | Phe        | Arg        | Ile | Glu        | Gly<br>135 | Cys        | Phe | Pro | Ala        | Leu<br>140 | Arg        | Asn | Leu | Phe        |
| 145        |            |            | Asn        |     | 150        |            |            |     |     | 155        |            |            |     |     | 160        |
|            |            |            | Leu        | 165 |            |            |            |     | 170 |            |            |            |     | 175 | _          |
|            |            |            | Ala<br>180 |     |            |            |            | 185 |     |            |            |            | 190 |     |            |
| Leu        | Asp        | His<br>195 | Asn        | Leu | Phe        | Asn        | Gly<br>200 | Ser | Ile | Pro        | Glu        | Ala<br>205 | Phe | Tyr | Lys        |
| His        | Pro<br>210 | Asn        | Leu        | Lys | Asp        | Met<br>215 | Tyr        | Ile | Glu | Gly        | Asn<br>220 | Ala        | Phe | Lys | Ser        |
| Asp<br>225 | Val        | Lys        | Ala        | Ile | Gly<br>230 | Ala        | His        | Lys | Val | Leu<br>235 |            | Leu        | Ser | Asp | Thr<br>240 |
| Asp        | Phe        | Leu        | Val        |     |            |            |            |     |     |            |            |            |     |     | ~ . 0      |

- (2) INFORMATION FOR SEQ ID NO:52:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 860 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..860
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481520
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:52: cattaagctg actaagttcg agaacgagga agctgtctgc aacccccaaa gaactcgtgc 60 taatgatatg aagaatttag ccactgctgc tgtaaaagca agcagatttt atagggagtt 120 gaattcccaa actgtcaaac acttggacac actccatgag taccttggca tgatgatggc 180 tgtccaaggc gcatttgcag atagatctag tgctttactg acagttcaga cgcttctatc 240 agagetteet tetetgeaaa etagagttga gaagetagag getgeateat egaaggtatt 300 tggtggtgac aaatcaagga tccgaaaaat agaagagtta aaagaaacaa tcaaggtcac 360 tgaggatgca aaaaatgttg ccatcaaagg gtatgagcga atcaaggaaa acaaccgatc 420 tgaggttgag aggttggaca gagaaaggcg tgcagacttc atgaacatga tgaagggttt 480 tgttgttaac caggttggat acgcagagaa aatgggaaac gtctgggcaa aggttgcaga 540 agagaccagc caatacgata gagagaagca gagcagctaa caaacacaga aaaaaagaga 600 gtgaacgatg ttcattttgg cataaccata ccaaatccat gtatggcaca gaatcacatt 660 gcgtaataat ggtttgtcaa aaagtgtagt ttcctttttc atatgttgta tctatcttga 720 tagagattgg taaacgttct tgtttgtttt ctttagttgc tgtaaattag ttttctagaa 780 gcatctctga ctacagctgc attgactcat acccattgtt ttctggtata tgccgcaaaa 840 gatatatctg atagtttggc
- (2) INFORMATION FOR SEQ ID NO:53:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 192 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..192
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481521
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:
- Ile Lys Leu Thr Lys Phe Glu Asn Glu Glu Ala Val Cys Asn Pro Gln

1 5 10 Arg Thr Arg Ala Asn Asp Met Lys Asn Leu Ala Thr Ala Ala Val Lys 25 Ala Ser Arg Phe Tyr Arg Glu Leu Asn Ser Gln Thr Val Lys His Leu Asp Thr Leu His Glu Tyr Leu Gly Met Met Met Ala Val Gln Gly Ala Phe Ala Asp Arg Ser Ser Ala Leu Leu Thr Val Gln Thr Leu Leu Ser 75 Glu Leu Pro Ser Leu Gln Thr Arg Val Glu Lys Leu Glu Ala Ala Ser 90 Ser Lys Val Phe Gly Gly Asp Lys Ser Arg Ile Arg Lys Ile Glu Glu 105 Leu Lys Glu Thr Ile Lys Val Thr Glu Asp Ala Lys Asn Val Ala Ile 120 Lys Gly Tyr Glu Arg Ile Lys Glu Asn Asn Arg Ser Glu Val Glu Arg 135 Leu Asp Arg Glu Arg Arg Ala Asp Phe Met Asn Met Met Lys Gly Phe 150 155 Val Val Asn Gln Val Gly Tyr Ala Glu Lys Met Gly Asn Val Trp Ala 170 Lys Val Ala Glu Glu Thr Ser Gln Tyr Asp Arg Glu Lys Gln Ser Ser 185

#### (2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 170 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide

165

- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..170
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481522

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54: Met Lys Asn Leu Ala Thr Ala Ala Val Lys Ala Ser Arg Phe Tyr Arg 5 10 Glu Leu Asn Ser Gln Thr Val Lys His Leu Asp Thr Leu His Glu Tyr Leu Gly Met Met Ala Val Gln Gly Ala Phe Ala Asp Arg Ser Ser 40 Ala Leu Leu Thr Val Gln Thr Leu Leu Ser Glu Leu Pro Ser Leu Gln 55 Thr Arg Val Glu Lys Leu Glu Ala Ala Ser Ser Lys Val Phe Gly Gly Asp Lys Ser Arg Ile Arg Lys Ile Glu Glu Leu Lys Glu Thr Ile Lys Val Thr Glu Asp Ala Lys Asn Val Ala Ile Lys Gly Tyr Glu Arg Ile 100 105 Lys Glu Asn Asn Arg Ser Glu Val Glu Arg Leu Asp Arg Glu Arg Arg 120 Ala Asp Phe Met Asn Met Met Lys Gly Phe Val Val Asn Gln Val Gly 135 Tyr Ala Glu Lys Met Gly Asn Val Trp Ala Lys Val Ala Glu Glu Thr 150 Ser Gln Tyr Asp Arg Glu Lys Gln Ser Ser

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- Client Docket No. 80142.004 (2) INFORMATION FOR SEO ID NO:55: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 136 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..136 (D) OTHER INFORMATION: / Ceres Seq. ID 1481523 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:55: Met Met Met Ala Val Gln Gly Ala Phe Ala Asp Arg Ser Ser Ala Leu 10 Leu Thr Val Gln Thr Leu Leu Ser Glu Leu Pro Ser Leu Gln Thr Arg 2.0 25 Val Glu Lys Leu Glu Ala Ala Ser Ser Lys Val Phe Gly Gly Asp Lys 40 Ser Arg Ile Arg Lys Ile Glu Glu Leu Lys Glu Thr Ile Lys Val Thr 55 Glu Asp Ala Lys Asn Val Ala Ile Lys Gly Tyr Glu Arg Ile Lys Glu 70 Asn Asn Arg Ser Glu Val Glu Arg Leu Asp Arg Glu Arg Arg Ala Asp 85 Phe Met Asn Met Met Lys Gly Phe Val Val Asn Gln Val Gly Tyr Ala 100 105 110 Glu Lys Met Gly Asn Val Trp Ala Lys Val Ala Glu Glu Thr Ser Gln 115 120 Tyr Asp Arg Glu Lys Gln Ser Ser 130 135 (2) INFORMATION FOR SEQ ID NO:56: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 2180 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear
- - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..2180
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481524
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:56: attactcaat tagtacaagt tgttatacaa ctaaatcttc atttgttaaa tcatctttac 60 tcaaattgaa tagtagtgtg cgtgtgaaaa caagaaaagt ggaaaaggac aaaagagaga 120 gtaaaggacg cctcctaata aagcactctt cttccttttc actttcctca ttgaagagag 180 agccaaattc agcttaaagc cccataagcg taagcgtaag cgtaagcgta agcgtaagcg 240 taagcgtaag cgtaagcgta agcgtaagcg taagcgtaag cgcggggata aatctctctc 300 ttcctcacct gcgttttcgt ggagcatctt cttcaacaat ggctgcttct ccgatctgat 360 catatectga tttgaatttt getatetete atgeetegaa etegttttgt egaegtagea 420 tcctagtgac tgaggaagaa gaagaagatg agcttcttta tcctctccgt cgtcgttttc 480 gtttctctcg ctttcttctc tcttccgcat tccgttgatt catctgtttc cgcttcacag 540 gatcctctca gactcatatt aggttcaccg aattttggaa catggaaagg tggaatctca 600 ttagcaccag gacctgaatc tgatgatgtt gtctctgatt acctcctctt agcagctcat 660 agaaccaaga gacctgacat tcttagagct tttaagcctt accatggtgg ctggaacatc 720 accaataatc actattgggc ttctgttgga tttacaggtg ctcctggttt catactagct 780 gttatctggc tcttgtcttt tggctctctt cttgttgttt atcattgctt caaatggaga 840 atatgtgata aagctaaagg atcatcattc gatacacgaa gaatctgttt cattttgttg 900 attgtgttta catgtgttgc agcggtggga tgcattcttt tatctgttgg acaagataag 960 tttcataccg aagctatgca tactcttaag tatgttgtaa accagtcaga ctacactgtg 1020

gagatcctcc agaatgtgac tcaatatctg tcccttgcga aaacgattaa cgtgacacag 1080 attgtcattc cgtctgatgt aatgggtgaa attgacaagt taaatgtcaa tcttaacact 1140 gcagctgtaa cactgggaga gacaacaaca gataaacgct gctaaaatta agagagtttt 1200 ctatgctgtg cgatcagctt tgatcacggt cgctactgtg atgctcatcc tttctttgt 1260 aggtctattg ctttctgtcc tccgccacca acatgttgtt catatattcg tcgtgagtgg 1320 gtggatactt gtggctgtga catttgttct ttgtggagtc tttctgatcc taaacaatgc 1380 aatttctgat acgtgtgtag caatgaagga atgggttgat aatcctcacg cagaaacagc 1440 tctcagcagc attctcccat gcgttgatca gcaaacaaca aaccagactc tttcacagag 1500 taaagttgtt atcaacagca tcgtgaccgt tgtaaacacc tttgtctatg ctgttgccaa 1560 tacaaaccca gctccaggtc aagaccgcta ttacaaccag tctggacctc cgatgcctcc 1620 tttatgcatc ccatttgatg caaacatgga agatcgccag tgctcgcctt gggaactatc 1680 aatagaaaat gcatcatcgg tctgggagaa ttacaaatgc gaggttacac catctggaat 1740 ctgcaccacc gtggggagag taacgccaga tacctttgga cagttggtag cagctgtgaa 1800 tgagagctac gctctagagc attacacgcc tccattgctt agcttccgag attgcaactt 1860 tgttagggaa acatttatga gtattacctc agattactgt ccaccgttag tacgtaatct 1920 gaggattgtg aacgcaggac tcggactgat ctccgtagga gtcttactat gtctggtgct 1980 atggatattc tatgcgaacc cccccaaagg gaggaagtgt ttgcggatcc acaccctcaa 2040 agaaaagatg atagctttgg taacggcttg gatactcatc actcagatga cgaacctaag 2100 ctttctgtag aatgcgtata gtatagaggt atagttagat agaatcagat attgtatttc ataatgatat gaaagagaac

- (2) INFORMATION FOR SEQ ID NO:57:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 245 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..245
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481525
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:
  Met Ser Phe Phe Ile Leu Ser Val Val Phe Val Ser Leu Ala Phe

1 5 10 15

Phe Ser Leu Pro His Ser Val Asp Ser Ser Val Ser Ala Ser Gln Asp

20 25 30

Pro Leu Arg Leu Ile Leu Gly Ser Pro Asn Phe Gly Thr Trp Lys Gly
35 40 45

Gly Ile Ser Leu Ala Pro Gly Pro Glu Ser Asp Asp Val Val Ser Asp
50 55 60

Tyr Leu Leu Ala Ala His Arg Thr Lys Arg Pro Asp Ile Leu Arg

Ala Phe Lys Pro Tyr His Gly Gly Trp Asn Ile Thr Asn Asn His Tyr
85 90 95

Trp Ala Ser Val Gly Phe Thr Gly Ala Pro Gly Phe Ile Leu Ala Val

Ile Trp Leu Leu Ser Phe Gly Ser Leu Leu Val Val Tyr His Cys Phe
115 120 125

Lys Trp Arg Ile Cys Asp Lys Ala Lys Gly Ser Ser Phe Asp Thr Arg 130 135 140

Arg Ile Cys Phe Ile Leu Leu Ile Val Phe Thr Cys Val Ala Ala Val 145 150 155 160

Gly Cys Ile Leu Leu Ser Val Gly Gln Asp Lys Phe His Thr Glu Ala 165 170 175

Met His Thr Leu Lys Tyr Val Val Asn Gln Ser Asp Tyr Thr Val Glu
180 185 190

Ile Leu Gln Asn Val Thr Gln Tyr Leu Ser Leu Ala Lys Thr Ile Asn 195 200 205

Val Thr Gln Ile Val Ile Pro Ser Asp Val Met Gly Glu Ile Asp Lys

210 215 220

Leu Asn Val Asn Leu Asn Thr Ala Ala Val Thr Leu Gly Glu Thr Thr
225 230 235 240

Thr Asp Lys Arg Cys
245

- (2) INFORMATION FOR SEQ ID NO:58:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 289 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..289
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481526
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

1 5 10 15 Gln His Val Val His Ile Phe Val Val Ser Gly Trp Ile Leu Val Ala 20 25 30

Met Leu Ile Leu Ser Phe Val Gly Leu Leu Leu Ser Val Leu Arg His

Val Thr Phe Val Leu Cys Gly Val Phe Leu Ile Leu Asn Asn Ala Ile 35 40 45

Ser Asp Thr Cys Val Ala Met Lys Glu Trp Val Asp Asn Pro His Ala 50 55 60

Glu Thr Ala Leu Ser Ser Ile Leu Pro Cys Val Asp Gln Gln Thr Thr 65 70 75 80

Asn Gln Thr Leu Ser Gln Ser Lys Val Val Ile Asn Ser Ile Val Thr
85 90 95

Val Val Asn Thr Phe Val Tyr Ala Val Ala Asn Thr Asn Pro Ala Pro
100 105 110

Gly Gln Asp Arg Tyr Tyr Asn Gln Ser Gly Pro Pro Met Pro Pro Leu 115 120 125

Cys Ile Pro Phe Asp Ala Asn Met Glu Asp Arg Gln Cys Ser Pro Trp
130 135 140

Glu Leu Ser Ile Glu Asn Ala Ser Ser Val Trp Glu Asn Tyr Lys Cys 145 150 155 160

Glu Val Thr Pro Ser Gly Ile Cys Thr Thr Val Gly Arg Val Thr Pro 165 170 175

Asp Thr Phe Gly Gln Leu Val Ala Ala Val Asn Glu Ser Tyr Ala Leu 180 185 190

Glu His Tyr Thr Pro Pro Leu Leu Ser Phe Arg Asp Cys Asn Phe Val 195 200 205

Arg Glu Thr Phe Met Ser Ile Thr Ser Asp Tyr Cys Pro Pro Leu Val 210 215 220

Arg Asn Leu Arg Ile Val Asn Ala Gly Leu Gly Leu Ile Ser Val Gly 225 230 235 240

Val Leu Leu Cys Leu Val Leu Trp Ile Phe Tyr Ala Asn Pro Pro Lys
245
250
255
Cly Arg Lyg Cys Leu Arg Ile Win The Lys Cys Leu Arg Ile Vin The Ly

Gly Arg Lys Cys Leu Arg Ile His Thr Leu Lys Glu Lys Met Ile Ala 260 265 270

Leu Val Thr Ala Trp Ile Leu Ile Thr Gln Met Thr Asn Leu Ser Phe 275 280 285 Leu

- (2) INFORMATION FOR SEQ ID NO:59:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 235 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..235
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481527
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:
- Met Lys Glu Trp Val Asp Asn Pro His Ala Glu Thr Ala Leu Ser Ser 1 5 10 15
- Ile Leu Pro Cys Val Asp Gln Gln Thr Thr Asn Gln Thr Leu Ser Gln 20 25 30
- Ser Lys Val Val Ile Asn Ser Ile Val Thr Val Val Asn Thr Phe Val 35 40 45
- Tyr Ala Val Ala Asn Thr Asn Pro Ala Pro Gly Gln Asp Arg Tyr Tyr 50 60
- Asn Gln Ser Gly Pro Pro Met Pro Pro Leu Cys Ile Pro Phe Asp Ala 65 70 75 80
- Asn Met Glu Asp Arg Gln Cys Ser Pro Trp Glu Leu Ser Ile Glu Asn 85 90 95
- Ala Ser Ser Val Trp Glu Asn Tyr Lys Cys Glu Val Thr Pro Ser Gly
  100 105 110
- Ile Cys Thr Thr Val Gly Arg Val Thr Pro Asp Thr Phe Gly Gln Leu
  115 120 125
- Val Ala Ala Val Asn Glu Ser Tyr Ala Leu Glu His Tyr Thr Pro Pro 130 135 140
- Leu Leu Ser Phe Arg Asp Cys Asn Phe Val Arg Glu Thr Phe Met Ser 145 150 155 160
- Ile Thr Ser Asp Tyr Cys Pro Pro Leu Val Arg Asn Leu Arg Ile Val
  165 170 175
- Asn Ala Gly Leu Gly Leu Ile Ser Val Gly Val Leu Leu Cys Leu Val
- Leu Trp Ile Phe Tyr Ala Asn Pro Pro Lys Gly Arg Lys Cys Leu Arg
  195 200 205
- Ile His Thr Leu Lys Glu Lys Met Ile Ala Leu Val Thr Ala Trp Ile 210 215 220
- Leu Ile Thr Gln Met Thr Asn Leu Ser Phe Leu 225 230 235
- (2) INFORMATION FOR SEQ ID NO:60:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 634 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..634
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481532
  - (xi) SEQUENCE DESCRIPTION: SEQ TO NO:60:

| aaaacatctc | tcgccgtcag | gttacatcta | tcgccaccgc | aaagagacca | ccgtctcctc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cgcaatcttc | ataacctaaa | caaccctcat | cccctggtac | ttaaacaatg | ggaaagagga | 120 |
| aatcaagagc | aaagcctgct | cctacgaagc | gaatggataa | gcttgacaca | atctttagtt | 180 |
| gtcctttctg | caatcacggg | tctagtgtcg | aatgcatcat | tgatatgaag | catctgattg | 240 |
| gtaaagcagc | ttgtagaatc | tgtgaagaaa | gctttaggta | ctactatcac | agctttgact | 300 |
| gaagctatag | acatttatag | cgaatggatc | gatgagtgcg | agagggttaa | taccgcggaa | 360 |
|            |            | ggaggatgat |            |            |            | 420 |
| tataacttct | gagacgagtg | ttttatcgaa | aatcatgtaa | gtcgtcgtct | tagagttatc | 480 |
| tgctttatgt | tgtaatatct | atctgatgaa | atcacaagaa | caatctttag | tgttttctca | 540 |

gtgtctgata gagaaacata catttaagtg aacaatcttt aatcacaata acagtgtatg 600 attatgattt gtaagtggat ttaaggcttt gctt

- (2) INFORMATION FOR SEQ ID NO:61:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 75 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..75
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481533
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

Lys Thr Ser Leu Ala Val Arg Leu His Leu Ser Pro Pro Gln Arg Asp
1 10 15

His Arg Leu Leu Arg Asn Leu His Asn Leu Asn Asn Pro His Pro Leu 20 25 30

Val Leu Lys Gln Trp Glu Arg Gly Asn Gln Glu Gln Ser Leu Leu Leu 35 40 45

Arg Ser Glu Trp Ile Ser Leu Thr Gln Ser Leu Val Val Leu Ser Ala 50 60

- Ile Thr Gly Leu Val Ser Asn Ala Ser Leu Ile
  65 70 75
- (2) INFORMATION FOR SEQ ID NO:62:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 64 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..64
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481534
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

Met Gly Lys Arg Lys Ser Arg Ala Lys Pro Ala Pro Thr Lys Arg Met

1 10 15

Asp Lys Leu Asp Thr Ile Phe Ser Cys Pro Phe Cys Asn His Gly Ser 20 25 30

Ser Val Glu Cys Ile Ile Asp Met Lys His Leu Ile Gly Lys Ala Ala 35 40 45

Cys Arg Ile Cys Glu Glu Ser Phe Arg Tyr Tyr His Ser Phe Asp 50 60

- (2) INFORMATION FOR SEQ ID NO:63:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 49 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..49
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481535
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

Met Asp Lys Leu Asp Thr Ile Phe Ser Cys Pro Phe Cys Asn His Gly

10 15
Ser Ser Val Glu Cys Ile Ile Asp Met Lys His Leu Ile Gly Lys Ala
20 25 30
Ala Cys Arg Ile Cys Glu Glu Ser Phe Arg Tyr Tyr Tyr His Ser Phe
35 40 45

- (2) INFORMATION FOR SEQ ID NO:64:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1668 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1668
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481540 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:
- atctgcattq ttctccgcct ctctctca aactcttcag tttgcaaaac ccttaagaag gtgtgaatta gtaagtaatg gggaagaaga agtttattga taagaaaaag gcggcgactt 120 tcgagttgtg tcctcgtgat acgtcagacc caagatacag tgatgcacca ggtggtgata 180 agatcttctt acgagttgat caaaaccctg ttaacatcaa tggtttcatt gaagaagatg 240 aagaagattt tagagttagg gtatcctgat gatggttata attacttgga gcatttgaga 300 gagattaaga atactggtgg tggttctaat ttctatgtga atcctaagta tgaggttgct cagttacctc gtgatgttaa ggcttatgat gcgtctcgtg ttaagatctc tggtatggtg 420 aatgaagaag gtaatgataa taagttgatg tatagtgttg cgtccaagac tgttaacgtc aaggtgcaga aagctattga tcctgaagtt gctgcgttgc ttgaaaacag tgatgggtct 540 gagtttggtt ctgatgttga ggatttggaa gaagattttg ttgttcaagc taatcttact 600 caaaagggtg aatcttctgg tgtgagcaat ggagagctcg agttttctgt aagacgtgag 660 gttagagaaa gagaaagtga tgaacctgtg gctgaaaacc cgagagttcc tcgtcaaatt 720 gatgagctat ttgatcagct cgaactcaat gaatatggaa gtgatagtga cggtgatggt tacatagctg aagatggaga agaagaagaa gaagaagact tcatggctca agaagttcag 840 aatcttattc atgggaaggc aaaagattat gagcttgaag aaaaatatat gaaccctgcg 900 gatatactga agaacagtga ctctgtcaga gataaagagg aagtggacac tgctgctcat 960 gttatccgcc gaactgtaga atatggtgaa aattttgata acgggaatga agatgaattt 1020 gtagagctga ctgaagaaag cagcgatgaa agcgagaagc atgattgtga aaccatagtc 1080 tcaacatact cgaatctcga taacctccct ggtaaaatcc ttgctgcaga gtcagctagg 1140 cagaagaagc tgagtgaaac attagctaac gcattgagtt caaatggaag aatcattaat 1200 ctccaaggga gagagagat tcctgtcgag tttttacctg gtaggagagc tgaacaaacc 1260 gatgtcaaag cggaaatccc aaaagctgaa ccgatcaaga ggaagactca tggtcaagag 1320 tcgaaagaag agaagaaaga gcggaaaaat gctgtaaaag ccgaaaagcg agaagcaagg 1380 ataattaaga aacagacaaa gatgctgtat tgcggtgaaa cgcagcgtgc tcaaagagct 1440 gttgctacct ctggtccatc gtcgagacct ctaaaataat atgttactaa ggtaaaacaa 1500 aacaattctc agactgttta aaaccagttt ttccagccat ttcgtgtaat atttgctgtt 1560 tgtttttttc tttttcatca agatttgaaa atcttgaatc ttgttttgga tgtggacgtt ttqaatatta tttattactt ttactagtct aatttcgaga aagtgatg
- (2) INFORMATION FOR SEQ ID NO:65:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 438 amino acids(B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..438
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481541
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

Met His Gln Val Val Ile Arg Ser Ser Tyr Glu Leu Ile Lys Thr Leu Leu Thr Ser Met Val Ser Leu Lys Lys Met Lys Lys Ile Leu Glu Leu Gly Tyr Pro Asp Asp Gly Tyr Asn Tyr Leu Glu His Leu Arg Glu Ile 40 Lys Asn Thr Gly Gly Gly Ser Asn Phe Tyr Val Asn Pro Lys Tyr Glu Val Ala Gln Leu Pro Arg Asp Val Lys Ala Tyr Asp Ala Ser Arg Val Lys Ile Ser Gly Met Val Asn Glu Glu Gly Asn Asp Asn Lys Leu Met 85 90 Tyr Ser Val Ala Ser Lys Thr Val Asn Val Lys Val Gln Lys Ala Ile 105 Asp Pro Glu Val Ala Ala Leu Leu Glu Asn Ser Asp Gly Ser Glu Phe 120 Gly Ser Asp Val Glu Asp Leu Glu Glu Asp Phe Val Val Gln Ala Asn 135 140 Leu Thr Gln Lys Gly Glu Ser Ser Gly Val Ser Asn Gly Glu Leu Glu 155 150 Phe Ser Val Arg Arg Glu Val Arg Glu Arg Glu Ser Asp Glu Pro Val 165 170 Ala Glu Asn Pro Arg Val Pro Arg Gln Ile Asp Glu Leu Phe Asp Gln 185 Leu Glu Leu Asn Glu Tyr Gly Ser Asp Ser Asp Gly Asp Gly Tyr Ile 200 Ala Glu Asp Gly Glu Glu Glu Glu Glu Asp Phe Met Ala Gln Glu 215 Val Gln Asn Leu Ile His Gly Lys Ala Lys Asp Tyr Glu Leu Glu Glu 230 235 Lys Tyr Met Asn Pro Ala Asp Ile Leu Lys Asn Ser Asp Ser Val Arg 245 250 Asp Lys Glu Glu Val Asp Thr Ala Ala His Val Ile Arg Arg Thr Val 265 Glu Tyr Gly Glu Asn Phe Asp Asn Gly Asn Glu Asp Glu Phe Val Glu 280 Leu Thr Glu Glu Ser Ser Asp Glu Ser Glu Lys His Asp Cys Glu Thr 295 Ile Val Ser Thr Tyr Ser Asn Leu Asp Asn Leu Pro Gly Lys Ile Leu 310 315 Ala Ala Glu Ser Ala Arg Gln Lys Lys Leu Ser Glu Thr Leu Ala Asn 325 330 Ala Leu Ser Ser Asn Gly Arg Ile Ile Asn Leu Gln Gly Arg Glu Arg 345 Ile Pro Val Glu Phe Leu Pro Gly Arg Arg Ala Glu Gln Thr Asp Val 360 Lys Ala Glu Ile Pro Lys Ala Glu Pro Ile Lys Arg Lys Thr His Gly 375 Gln Glu Ser Lys Glu Glu Lys Lys Glu Arg Lys Asn Ala Val Lys Ala 390 395 Glu Lys Arg Glu Ala Arg Ile Ile Lys Lys Gln Thr Lys Met Leu Tyr 405 410 Cys Gly Glu Thr Gln Arg Ala Gln Arg Ala Val Ala Thr Ser Gly Pro 420 425 Ser Ser Arg Pro Leu Lys 435

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..419
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481542 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:66: Met Val Ser Leu Lys Lys Met Lys Lys Ile Leu Glu Leu Gly Tyr Pro 10 Asp Asp Gly Tyr Asn Tyr Leu Glu His Leu Arg Glu Ile Lys Asn Thr 25 Gly Gly Gly Ser Asn Phe Tyr Val Asn Pro Lys Tyr Glu Val Ala Gln 40 Leu Pro Arg Asp Val Lys Ala Tyr Asp Ala Ser Arg Val Lys Ile Ser 55 Gly Met Val Asn Glu Glu Gly Asn Asp Asn Lys Leu Met Tyr Ser Val 70 Ala Ser Lys Thr Val Asn Val Lys Val Gln Lys Ala Ile Asp Pro Glu 90 Val Ala Ala Leu Leu Glu Asn Ser Asp Gly Ser Glu Phe Gly Ser Asp 105 Val Glu Asp Leu Glu Glu Asp Phe Val Val Gln Ala Asn Leu Thr Gln 120 Lys Gly Glu Ser Ser Gly Val Ser Asn Gly Glu Leu Glu Phe Ser Val 135 Arg Arg Glu Val Arg Glu Arg Glu Ser Asp Glu Pro Val Ala Glu Asn 150 155 Pro Arg Val Pro Arg Gln Ile Asp Glu Leu Phe Asp Gln Leu Glu Leu 165 170 Asn Glu Tyr Gly Ser Asp Ser Asp Gly Asp Gly Tyr Ile Ala Glu Asp 185 Gly Glu Glu Glu Glu Glu Asp Phe Met Ala Gln Glu Val Gln Asn 200 Leu Ile His Gly Lys Ala Lys Asp Tyr Glu Leu Glu Glu Lys Tyr Met 215 Asn Pro Ala Asp Ile Leu Lys Asn Ser Asp Ser Val Arg Asp Lys Glu 230 235 Glu Val Asp Thr Ala Ala His Val Ile Arg Arg Thr Val Glu Tyr Gly 245 250 Glu Asn Phe Asp Asn Gly Asn Glu Asp Glu Phe Val Glu Leu Thr Glu 265 Glu Ser Ser Asp Glu Ser Glu Lys His Asp Cys Glu Thr Ile Val Ser 280 Thr Tyr Ser Asn Leu Asp Asn Leu Pro Gly Lys Ile Leu Ala Ala Glu 295 300 Ser Ala Arg Gln Lys Lys Leu Ser Glu Thr Leu Ala Asn Ala Leu Ser 310 315 Ser Asn Gly Arg Ile Ile Asn Leu Gln Gly Arg Glu Arg Ile Pro Val 325 330 Glu Phe Leu Pro Gly Arg Arg Ala Glu Gln Thr Asp Val Lys Ala Glu 345 Ile Pro Lys Ala Glu Pro Ile Lys Arg Lys Thr His Gly Gln Glu Ser 360 Lys Glu Glu Lys Lys Glu Arg Lys Asn Ala Val Lys Ala Glu Lys Arg 375 380 Glu Ala Arg Ile Ile Lys Lys Gln Thr Lys Met Leu Tyr Cys Gly Glu 390 395

Thr Gln Arg Ala Gln Arg Ala Val Ala Thr Ser Gly Pro Ser Ser Arg 405 410 415

Pro Leu Lys

#### (2) INFORMATION FOR SEQ ID NO:67:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 413 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..413
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481543
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:
- Met Lys Lys Ile Leu Glu Leu Gly Tyr Pro Asp Asp Gly Tyr Asn Tyr 1 5 10 15
- Leu Glu His Leu Arg Glu Ile Lys Asn Thr Gly Gly Gly Ser Asn Phe
  20 25 30
- Tyr Val Asn Pro Lys Tyr Glu Val Ala Gln Leu Pro Arg Asp Val Lys
  35 40 45
- Ala Tyr Asp Ala Ser Arg Val Lys Ile Ser Gly Met Val Asn Glu Glu 50 60
- Gly Asn Asp Asn Lys Leu Met Tyr Ser Val Ala Ser Lys Thr Val Asn 65 70 75 80
- Val Lys Val Gln Lys Ala Ile Asp Pro Glu Val Ala Ala Leu Leu Glu 85 90 95
- Asn Ser Asp Gly Ser Glu Phe Gly Ser Asp Val Glu Asp Leu Glu Glu 100 105 110
- Asp Phe Val Val Gln Ala Asn Leu Thr Gln Lys Gly Glu Ser Ser Gly
  115 120 125
- Val Ser Asn Gly Glu Leu Glu Phe Ser Val Arg Arg Glu Val Arg Glu 130 135 140
- Arg Glu Ser Asp Glu Pro Val Ala Glu Asn Pro Arg Val Pro Arg Gln
  145 150 155 160
- Ile Asp Glu Leu Phe Asp Gln Leu Glu Leu Asn Glu Tyr Gly Ser Asp 165 170 175
- Ser Asp Gly Asp Gly Tyr Ile Ala Glu Asp Gly Glu Glu Glu Glu 180 185 190
- Glu Asp Phe Met Ala Gln Glu Val Gln Asn Leu Ile His Gly Lys Ala 195 200 205
- Lys Asp Tyr Glu Leu Glu Glu Lys Tyr Met Asn Pro Ala Asp Ile Leu 210 215 220
- Lys Asn Ser Asp Ser Val Arg Asp Lys Glu Glu Val Asp Thr Ala Ala 225 230 235 240
- His Val Ile Arg Arg Thr Val Glu Tyr Gly Glu Asn Phe Asp Asn Gly
  245
  250
  255
  Asn Glu Asn Glu Phe Val Glu Iou Thr Glu Glu Gor Gor Asn Glu Green
- Asn Glu Asp Glu Phe Val Glu Leu Thr Glu Glu Ser Ser Asp Glu Ser 260 265 270
- Glu Lys His Asp Cys Glu Thr Ile Val Ser Thr Tyr Ser Asn Leu Asp 275 280 285
- Asn Leu Pro Gly Lys Ile Leu Ala Ala Glu Ser Ala Arg Gln Lys Lys 290 295 300
- Leu Ser Glu Thr Leu Ala Asn Ala Leu Ser Ser Asn Gly Arg Ile Ile 305 310 315 320
- Asn Leu Gln Gly Arg Glu Arg Ile Pro Val Glu Phe Leu Pro Gly Arg
  325 330 335
- Arg Ala Glu Gln Thr Asp Val Lys Ala Glu Ile Pro Lys Ala Glu Pro

- (2) INFORMATION FOR SEQ ID NO:68:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1601 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear '
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1601
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481544
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

aatcttcctc attcgaaggt tactcgcact tcctctgcac acttcttcct ctccatctaa 60 cctcagtact cctacaatcc tctaagaatc catagatcta ctgctgggaa aagcttcgcg 120 acaatgtett ggeetaegga ttetgagtta aatteeataa aggaggeagt ggeteagatg 180 agtggaagag ataaaggaga agttcgagtg gtggtcgctc cttatcqtat atqtccttta 240 ggagctcaca ttgatcacca gggtggaact gtatcagcta tqacqattaa aqqqatcctt 300 cttggttttg ttccatcggg tgatactcag gtccagttgc gctctgcaca atttgaagga 360 gaagtatgtt tcagagtaga tgaaatccag cacccaatag gcctagcaaa caagaatggt 420 gcaagcacgc catctccatc gaaggaaaaa agtatctggg gtacttatgc cagaggagca 480 gtttatgcgt tacagagcag caaaaagaat ctcaaacagg gcattattgg ttacctcagt 540 ggctcaaatg gactagatag ctccgggctt agctcatcag ctgctgttgg tgtggcatac 600 ctgctagctc tagagaatgc aaacgaattg actgtatccc caacagaaaa tatcgaatat 660 gacaggetta ttgagaatgt gtatctgggt ctgcggaatg gaattttgga tcaatcaget 720 attttgcttt cgaattatgg gtgtctaaca tacatggact gcaagacttt ggaccacgag 780 cttgtacagg ctcctgaact ggagaaaccg ttcaggatat tgttagcatt ctcaggcttg 840 aggcaggcgt tgaccaccaa cccaggatat aatctgcgag tttctgagtg tcaagaggca 900 gcaaaagttc ttttgactgc atctgggaac agtgagctgg aacctacgtt gtgcaatgtt 960 gagcatgcgg tctatgaagc tcacaagcat gagctgaaac cggttttagc taaaaqaqca 1020 gagcattatt tctcggagaa catgcgagtt atcaaaggac gggaagcctg ggcttcaggg 1080 aatcttgaag aatttggaaa gctaatttca gcatccggct tgagttccat tgagaattac 1140 gaatgcggtg cggagccact gatccagcta tacaagattc ttctgaaggc tcctggtgta 1200 tatggagcta gattcagcgg tgcaggtttc aggggatgtt gtctagcctt tgtagatgca 1260 gtaaaagctg aggcagctgc ttcatatgtg aaggatgaat atgaaaaggc ccaacccgag 1320 tttgctaaca atctaaatgg aggaaaacct gttctcatct gtgaagcagg tgacgctgct 1380 cgtgttcttc tctgatcaat cctggagttt ttggtttctt ccccacttaa actcgatttt 1440 tttgtccctt atatctctca cgcttattga ttctttgctt gtttatctct ttttgatcct 1500 gtctgagaaa ttctctggtc tctttggtcg gagtttcatc attgcttgat acatttttt 1560 tgctacaaat acataatgta aatcattctc taccgttttc c

- (2) INFORMATION FOR SEQ ID NO:69:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 423 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..423
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481545

| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:69: |           |           |            |           |           |           |           |            |            |           |           |           |            |            |           |
|--|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----------|------------|------------|-----------|
| Met<br>1                                 | Ser       | Trp       | Pro        | Thr<br>5  | Asp       | Ser       | Glu       | Leu        | Asn<br>10  | Ser       | Ile       | Lys       | Glu        | Ala<br>15  | Val       |
|  |           |           | Ser<br>20  |           |           |           |           | 25         |            |           |           |           | 30         |            |           |
| Pro                                      | Tyr       | Arg<br>35 | Ile        | Cys       | Pro       | Leu       | Gly<br>40 | Ala        | His        | Ile       | Asp       | His<br>45 | Gln        | Gly        | Gly       |
| Thr                                      | Val<br>50 | Ser       | Ala        | Met       | Thr       | Ile<br>55 | Lys       | Gly        | Ile        | Leu       | Leu<br>60 | Gly       | Phe        | Val        | Pro       |
| Ser<br>65                                | Gly       | Asp       | Thr        | Gln       | Val<br>70 | Gln       | Leu       | Arg        | Ser        | Ala<br>75 | Gln       | Phe       | Glu        | Gly        | Glu<br>80 |
| Val                                      | Cys       | Phe       | Arg        | Val<br>85 | Asp       | Glu       | Ile       | Gln        | His<br>90  | Pro       | Ile       | Gly       | Leu        | Ala<br>95  | Asn       |
| Lys                                      | Asn       | Gly       | Ala<br>100 | Ser       | Thr       | Pro       | Ser       | Pro<br>105 | Ser        | Lys       | Glu       | Lys       | Ser<br>110 | Ile        | Trp       |
| _  |           | 115       | Ala        | _         | -         |           | 120       | _          |            |           |           | 125       |            | _          |           |
|  | 130       | _         | Gln        | _         |           | 135       | _         | -          |            |           | 140       |           |            | _          |           |
| 145                                      |           |           | Gly        |           | 150       |           |           |            |            | 155       |           |           |            |            | 160       |
|  |           |           | Glu        | 165       |           |           |           |            | 170        |           |           |           |            | 175        |           |
|  |           | _         | Asp<br>180 |           |           |           |           | 185        |            | _         |           | _         | 190        | _          |           |
| _  |           | 195       | Asp        |           |           |           | 200       |            |            |           |           | 205       | _          |            |           |
|  | 210       |           | Asp        | _         | _         | 215       |           | _          |            |           | 220       |           |            |            |           |
| 225                                      |           |           | Lys        |           | 230       |           |           |            |            | 235       |           |           | _          |            | 240       |
|  |           |           | Thr        | 245       |           |           | _         | _          | 250        |           | _         |           |            | 255        |           |
|  |           |           | Ala<br>260 |           |           |           |           | 265        |            |           |           |           | 270        |            |           |
|  |           | 275       | Leu        | _         |           |           | 280       |            |            |           | _         | 285       |            |            | _         |
|  | 290       |           | Lys        |           |           | 295       |           | _          | _          |           | 300       |           | _          |            |           |
| 305                                      |           |           | Arg        |           | 310       |           |           |            |            | 315       |           |           |            |            | 320       |
|  |           |           | Phe        | 325       |           |           |           |            | 330        |           |           |           |            | 335        |           |
|  |           |           | Glu<br>340 |           |           |           |           | 345        |            |           |           |           | 350        |            |           |
|  |           | 355       | Ala        |           |           |           | 360       |            |            |           |           | 365       |            |            |           |
|  | 370       |           | Cys        |           |           | 375       |           |            |            |           | 380       |           |            |            |           |
| 385                                      |           |           | Tyr        |           | 390       |           |           |            |            | 395       |           |           |            |            | 400       |
|  |           |           | Leu        | 405       | _         |           | Lys       | Pro        | Val<br>410 | Leu       | Ile       | Cys       | Glu        | Ala<br>415 | Gly       |
| Asp                                      | Ala       | Ala       | Arg        | Val       | Leu       | Leu       |           |            |            |           |           |           |            |            |           |

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  (2) INFORMATION FOR SEQ ID NO:70:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 405 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..405

| (D) OTHER INFORMATION: / Ceres Seq. ID 1481546 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:70: |           |           |            |            |            |           |           |     |            |            |           |           |     |            |            |
|---|-----------|-----------|------------|------------|------------|-----------|-----------|-----|------------|------------|-----------|-----------|-----|------------|------------|
|   | (X1       | ) SE      | QUEN       | CE D       | ESCR       | IPTI      | ON:       | SEQ | ID N       | 0:70       | :         |           |     |            |            |
| 1   |           |           | Arg        | 5          |            |           |           |     | 10         |            |           |           |     | 15         |            |
|   |           |           | Pro<br>20  |            |            |           |           | 25  |            |            |           |           | 30  |            |            |
| Ser   | Ala       | Met<br>35 | Thr        | Ile        | Lys        | Gly       | Ile<br>40 | Leu | Leu        | Gly        | Phe       | Val<br>45 | Pro | Ser        | Gly        |
| Asp   | Thr<br>50 | Gln       | Val        | Gln        | Leu        | Arg<br>55 | Ser       | Ala | Gln        | Phe        | Glu<br>60 | Gly       | Glu | Val        | Cys        |
| Phe<br>65   | Arg       | Val       | Asp        | Glu        | Ile<br>70  | Gln       | His       | Pro | Ile        | Gly<br>75  | Leu       | Ala       | Asn | Lys        | Asn<br>80  |
| Gly   | Ala       | Ser       | Thr        | Pro<br>85  | Ser        | Pro       | Ser       | Lys | Glu<br>90  | Lys        | Ser       | Ile       | Trp | Gly<br>95  |            |
|   |           |           | Gly<br>100 |            |            |           |           | 105 |            |            |           |           | 110 |            |            |
|   |           | 115       | Ile        |            |            |           | 120       |     |            |            |           | 125       |     |            |            |
|   | 130       |           | Ser        |            |            | 135       |           |     |            |            | 140       |           |     |            |            |
| 145   |           |           | Ala        |            | 150        |           |           |     |            | 155        |           |           |     |            | 160        |
| Tyr   | Asp       | Arg       | Leu        | Ile<br>165 | Glu        | Asn       | Val       | Tyr | Leu<br>170 | Gly        | Leu       | Arg       | Asn | Gly<br>175 | Ile        |
|   |           |           | Ser<br>180 |            |            |           |           | 185 |            |            |           |           | 190 |            | _          |
|   |           | 195       | Lys        |            |            |           | 200       |     |            |            |           | 205       |     |            |            |
|   | 210       |           | Phe        |            |            | 215       |           |     |            |            | 220       |           |     |            |            |
| 225   |           |           | Asn        |            | 230        |           |           |     |            | 235        |           |           |     |            | 240        |
|   |           |           | Val        | 245        |            |           |           |     | 250        |            |           |           |     | 255        |            |
|   |           |           | Asn<br>260 |            |            |           |           | 265 |            |            |           |           | 270 |            |            |
|   |           | 275       | Val        |            |            |           | 280       |     |            |            |           | 285       |     |            |            |
|   | 290       |           | Ile        |            |            | 295       |           |     |            |            | 300       |           |     |            |            |
| 305   |           |           | Lys        |            | 310        |           |           |     |            | 315        |           |           |     |            | 320        |
|   |           |           | Gly        | 325        |            |           |           |     | 330        |            |           |           |     | 335        |            |
|   |           |           | Gly<br>340 |            |            |           |           | 345 |            |            |           |           | 350 |            |            |
|   |           | 355       | Leu<br>-   |            |            |           | 360       |     |            |            |           | 365       |     |            |            |
|   | 370       |           | Lys        |            |            | 375       |           |     |            |            | 380       |           |     |            |            |
| 385   |           |           | Gly        |            | Lys<br>390 | Pro       | Val       | Leu | Ile        | Cys<br>395 | Glu       | Ala       | Gly | Asp        | Ala<br>400 |
| Ala   | Arg       | Val       | Leu        | Leu        |            |           |           |     |            |            |           |           |     |            |            |

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#### (2) INFORMATION FOR SEQ ID NO:71:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 371 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..371
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481547
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:
- Met Thr Ile Lys Gly Ile Leu Leu Gly Phe Val Pro Ser Gly Asp Thr 1 5 10 15
- Gln Val Gln Leu Arg Ser Ala Gln Phe Glu Gly Glu Val Cys Phe Arg
  20 25 30
- Val Asp Glu Ile Gln His Pro Ile Gly Leu Ala Asn Lys Asn Gly Ala 35 40 45
- Ser Thr Pro Ser Pro Ser Lys Glu Lys Ser Ile Trp Gly Thr Tyr Ala 50 60
- Arg Gly Ala Val Tyr Ala Leu Gln Ser Ser Lys Lys Asn Leu Lys Gln 65 70 75 80
- Gly Ile Ile Gly Tyr Leu Ser Gly Ser Asn Gly Leu Asp Ser Ser Gly 85 90 95
- Leu Ser Ser Ala Ala Val Gly Val Ala Tyr Leu Leu Ala Leu Glu 100 105 110
- Asn Ala Asn Glu Leu Thr Val Ser Pro Thr Glu Asn Ile Glu Tyr Asp 115 120 125
- Arg Leu Ile Glu Asn Val Tyr Leu Gly Leu Arg Asn Gly Ile Leu Asp 130 135 140
- Gln Ser Ala Ile Leu Leu Ser Asn Tyr Gly Cys Leu Thr Tyr Met Asp 145 150 155 160
- Cys Lys Thr Leu Asp His Glu Leu Val Gln Ala Pro Glu Leu Glu Lys
  165 170 175
- Pro Phe Arg Ile Leu Leu Ala Phe Ser Gly Leu Arg Gln Ala Leu Thr 180 185 190
- Thr Asn Pro Gly Tyr Asn Leu Arg Val Ser Glu Cys Gln Glu Ala Ala 195 200 205
- Lys Val Leu Leu Thr Ala Ser Gly Asn Ser Glu Leu Glu Pro Thr Leu 210 215 220
- Cys Asn Val Glu His Ala Val Tyr Glu Ala His Lys His Glu Leu Lys 225 230 235 240
- Pro Val Leu Ala Lys Arg Ala Glu His Tyr Phe Ser Glu Asn Met Arg
  245
  250
  250
  250
  250
  250
  250
- Val Ile Lys Gly Arg Glu Ala Trp Ala Ser Gly Asn Leu Glu Glu Phe
  260 265 270
- Gly Lys Leu Ile Ser Ala Ser Gly Leu Ser Ser Ile Glu Asn Tyr Glu 275 280 285
- Cys Gly Ala Glu Pro Leu Ile Gln Leu Tyr Lys Ile Leu Leu Lys Ala 290 295 300
- Pro Gly Val Tyr Gly Ala Arg Phe Ser Gly Ala Gly Phe Arg Gly Cys 305 310 315 320
- Cys Leu Ala Phe Val Asp Ala Val Lys Ala Glu Ala Ala Ala Ser Tyr 325 330 335
- Val Lys Asp Glu Tyr Glu Lys Ala Gln Pro Glu Phe Ala Asn Asn Leu 340 345 350
- Asn Gly Gly Lys Pro Val Leu Ile Cys Glu Ala Gly Asp Ala Ala Arg 355 360 365

Val Leu Leu 370

- (2) INFORMATION FOR SEQ ID NO:72:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 915 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..915
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481564
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

caaaagagag aaaaggatgg tcaataacgg tccatgatct ctccggttca cccgtggcta 60 tggcctctat ggtaacacct ttcgtaccat ctcctggttc gaaccgggtg actcggtcaa 120 gtcccggagc gtggcttatt cttcgacctg acggttgcac atggaagcca tggggaagac 180 tagaagcatg gcgtgaggct ggttactctg acactctagg ttatcgtttc gagcttttcc 240 aagacggtat agccaccgca gtttctgcat cgtcgtcgat cagtttgaaa aatggcggga 300 gttttgttat tgatgttacc ggcggtacaa gcacaacggc gtctacgccg acaacgagtc 360 ctcaaggaag ctgggatctc ggatccggtt caagcgccgg ttcaagaccc gcgtcgagac 420 caggatcagg atccgggtcg gatttcggat atctactacc gcaacatccg tctgcggccg 480 cgcaaaacag agggttcgtt atgtcggcta cggttgaagg agttgggaaa cgaagcaaac 540 cagaagtaga agtcggtgtg acgcacgtga catgtacgga ggatgcagca gcgcacgtgg 600 cattagctgc ggcggtggat ctgagtttgg atgcttgcag gcttttctca cacaagctaa 660 ggaaagagct gagacagcaa agccagcttg gtgtcgtttg acttgtttcg ctttgtcgtt 720 ttaccaattc atgagttgtc ttccactcac atttttttgg tttgaatttt ctatttttt 780 ctttttaaga tagcgttagg aattagccag ccatttttt gagaggtgga tgtcatcatt 840 attaaaaatt gttaatatct ttctcagtac agctaagaaa tgacagtaac aactaacaaa 900 caactcatta tctcc

- (2) INFORMATION FOR SEQ ID NO:73:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 232 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..232
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481565
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

Lys Glu Arg Lys Gly Trp Ser Ile Thr Val His Asp Leu Ser Gly Ser 1 5 10 15
Pro Val Ala Met Ala Ser Met Val Thr Pro Phe Val Pro Ser Pro Gly

20 25 30

Ser Asn Arg Val Thr Arg Ser Ser Pro Gly Ala Trp Leu Ile Leu Arg 35 40 45

Pro Asp Gly Cys Thr Trp Lys Pro Trp Gly Arg Leu Glu Ala Trp Arg

Glu Ala Gly Tyr Ser Asp Thr Leu Gly Tyr Arg Phe Glu Leu Phe Gln 65 70 75 80

Asp Gly Ile Ala Thr Ala Val Ser Ala Ser Ser Ser Ile Ser Leu Lys 85 90 95

As Gly Gly Ser Phe Val Ile Asp Val Thr Gly Gly Thr Ser Thr Thr 100 105 110

Ala Ser Thr Pro Thr Thr Ser Pro Gln Gly Ser Trp Asp Leu Gly Ser 115 120 125

Gly Ser Ser Ala Gly Ser Arg Pro Ala Ser Arg Pro Gly Ser Gly Ser

130 135 Gly Ser Asp Phe Gly Tyr Leu Leu Pro Gln His Pro Ser Ala Ala Ala 150 155 Gln Asn Arg Gly Phe Val Met Ser Ala Thr Val Glu Gly Val Gly Lys 170 Arg Ser Lys Pro Glu Val Glu Val Gly Val Thr His Val Thr Cys Thr 185 Glu Asp Ala Ala Ala His Val Ala Leu Ala Ala Ala Val Asp Leu Ser 200 Leu Asp Ala Cys Arg Leu Phe Ser His Lys Leu Arg Lys Glu Leu Arg 215 Gln Gln Ser Gln Leu Gly Val Val 225 230 (2) INFORMATION FOR SEO ID NO:74: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 213 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..213 (D) OTHER INFORMATION: / Ceres Seq. ID 1481566 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:74: Met Ala Ser Met Val Thr Pro Phe Val Pro Ser Pro Gly Ser Asn Arg 10 Val Thr Arg Ser Ser Pro Gly Ala Trp Leu Ile Leu Arg Pro Asp Gly 25 Cys Thr Trp Lys Pro Trp Gly Arg Leu Glu Ala Trp Arg Glu Ala Gly 40 Tyr Ser Asp Thr Leu Gly Tyr Arg Phe Glu Leu Phe Gln Asp Gly Ile 55 Ala Thr Ala Val Ser Ala Ser Ser Ser Ile Ser Leu Lys Asn Gly Gly 70 75 Ser Phe Val Ile Asp Val Thr Gly Gly Thr Ser Thr Thr Ala Ser Thr 90 Pro Thr Thr Ser Pro Gln Gly Ser Trp Asp Leu Gly Ser Gly Ser Ser 105 Ala Gly Ser Arg Pro Ala Ser Arg Pro Gly Ser Gly Ser Gly Ser Asp 120 Phe Gly Tyr Leu Leu Pro Gln His Pro Ser Ala Ala Ala Gln Asn Arg 135 140 Gly Phe Val Met Ser Ala Thr Val Glu Gly Val Gly Lys Arg Ser Lys 150 155 Pro Glu Val Glu Val Gly Val Thr His Val Thr Cys Thr Glu Asp Ala 165 170 Ala Ala His Val Ala Leu Ala Ala Ala Val Asp Leu Ser Leu Asp Ala 185 Cys Arg Leu Phe Ser His Lys Leu Arg Lys Glu Leu Arg Gln Gln Ser 195 200 205 Gln Leu Gly Val Val 210

- (2) INFORMATION FOR SEQ ID NO:75:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 210 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

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(ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..210
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481567
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:
Met Val Thr Pro Phe Val Pro Ser Pro Gly Ser Asn Arg Val Thr Arg
                                    10
Ser Ser Pro Gly Ala Trp Leu Ile Leu Arg Pro Asp Gly Cys Thr Trp
            20
                                25
Lys Pro Trp Gly Arg Leu Glu Ala Trp Arg Glu Ala Gly Tyr Ser Asp
                            40
Thr Leu Gly Tyr Arg Phe Glu Leu Phe Gln Asp Gly Ile Ala Thr Ala
                        55
Val Ser Ala Ser Ser Ser Ile Ser Leu Lys Asn Gly Gly Ser Phe Val
                    7.0
                                        75
Ile Asp Val Thr Gly Gly Thr Ser Thr Thr Ala Ser Thr Pro Thr Thr
                8.5
                                    90
Ser Pro Gln Gly Ser Trp Asp Leu Gly Ser Gly Ser Ser Ala Gly Ser
            100
                                105
Arg Pro Ala Ser Arg Pro Gly Ser Gly Ser Gly Ser Asp Phe Gly Tyr
                            120
Leu Leu Pro Gln His Pro Ser Ala Ala Gln Asn Arg Gly Phe Val
                        135
Met Ser Ala Thr Val Glu Gly Val Gly Lys Arg Ser Lys Pro Glu Val
                    150
                                        155
Glu Val Gly Val Thr His Val Thr Cys Thr Glu Asp Ala Ala His
                165
                                    170
Val Ala Leu Ala Ala Ala Val Asp Leu Ser Leu Asp Ala Cys Arg Leu
            180
                                185
Phe Ser His Lys Leu Arg Lys Glu Leu Arg Gln Gln Ser Gln Leu Gly
        195
                            200
Val Val
    210
(2) INFORMATION FOR SEQ ID NO:76:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 1330 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..1330
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481580
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

atcccaaagt ctcctaaggc gagaagggat ccggtcgtcg cactaggttt ccttttcttt 60 ttttttttgg gtttcaaatt ttttcatcat atctcctgaa aatcttcttc attcgcctcc 120 aattttgctc atgttcgtcc gatccaacat tcttcgtgct ctgattttta ctgtgctgga 180 aacagttacc tcctcttgat tcagttttga ttcttcaaag cctcagagat aatttggttt 240 tctctaatct cttgtaagga gaaaacttgc ttggagatca aaatgatgca ttcaagctgc 300 aaaggacttg tgctgcttct attcttattt gtcgttgtat tcattggaaa caccgatgcg 360 aatgctcagt gggaggtttc acataaagta agagcttctc cccatgaaaa catgggacgt 420 aatgttattg acggaagtgg tgtagagaaa acgttacatg acattggaat gggtgaaaag 480 agaggcactc acaacaaagt ttcagtctca acagttgcgt tgttcacctt ggctatggct 540 gctgccactg ggttaggtgc tgtgcccttc ttctttgttg agcttgatcc tcaatgggct 600 ggaatttgca atggcatggc tgctggttga tgttggccgc tagctttgat cttgttaagg 660 aagggcagga acatggctct ggaaactggg ttgttactgg gatcctagcc ggtgctttgt 720 tcatttggct ctgtaagcag attcttgaac aatatggtga agttagtatg ctggatatta 780

aaggogoaga tgcaactaaa gttgttotog toataggaat tatgacactt cattotttog 840 gggaaggatc aggggttggt gtatcattcg ctggctcaaa aggttttagc caagggcttc 900 tggtcacttt ggccatagct gttcataaca ttccagaagg gttggctgtt agcatggtgt 960 tggcatcaag gggtgtctct ccacaaaatg ccatgctctg gagtataata acatccttac 1020 ctcagcctct cgtcgccgtg ccagcttttt tatgcgctga tgcgttcagc aagtttttgc 1080 ctttttgcac tggatttgct gccggatgca tgatttggat ggttattgct gaagtgcttc 1140 ctgatgcttt taaggaagcg tctccttcgc aagtggcatc tgcagccacc atatcagtag 1200 catccatgga agctcttagc actcttttcg agagtttcac acatgattac aactcagagg 1260 atgcttctgg cttcttcgtt tcactcctct ttggtctggg tccattgctt gggggagtat ttctggttgc

- (2) INFORMATION FOR SEQ ID NO:77:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 245 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..245
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481581
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

Met Gly Trp Asn Leu Gln Trp His Gly Cys Trp Leu Met Leu Ala Ala 10 Ser Phe Asp Leu Val Lys Glu Gly Gln Glu His Gly Ser Gly Asn Trp 20 25

Val Val Thr Gly Ile Leu Ala Gly Ala Leu Phe Ile Trp Leu Cys Lys 40

Gln Ile Leu Glu Gln Tyr Gly Glu Val Ser Met Leu Asp Ile Lys Gly 55

Ala Asp Ala Thr Lys Val Val Leu Val Ile Gly Ile Met Thr Leu His 7.0 75

Ser Phe Gly Glu Gly Ser Gly Val Gly Val Ser Phe Ala Gly Ser Lys 85 90

Gly Phe Ser Gln Gly Leu Leu Val Thr Leu Ala Ile Ala Val His Asn 105

Ile Pro Glu Gly Leu Ala Val Ser Met Val Leu Ala Ser Arg Gly Val 120

Ser Pro Gln Asn Ala Met Leu Trp Ser Ile Ile Thr Ser Leu Pro Gln 135 140

Pro Leu Val Ala Val Pro Ala Phe Leu Cys Ala Asp Ala Phe Ser Lys

150 155 Phe Leu Pro Phe Cys Thr Gly Phe Ala Ala Gly Cys Met Ile Trp Met

165 170 175 Val Ile Ala Glu Val Leu Pro Asp Ala Phe Lys Glu Ala Ser Pro Ser 185

Gln Val Ala Ser Ala Ala Thr Ile Ser Val Ala Ser Met Glu Ala Leu 200 205

Ser Thr Leu Phe Glu Ser Phe Thr His Asp Tyr Asn Ser Glu Asp Ala 215 220

Ser Gly Phe Phe Val Ser Leu Leu Phe Gly Leu Gly Pro Leu Leu Gly 235 240

Gly Val Phe Leu Val

245

- (2) INFORMATION FOR SEQ ID NO:78:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 233 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..233 (D) OTHER INFORMATION: / Ceres Seq. ID 1481582 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:78: Met Leu Ala Ala Ser Phe Asp Leu Val Lys Glu Gly Gln Glu His Gly 10 Ser Gly Asn Trp Val Val Thr Gly Ile Leu Ala Gly Ala Leu Phe Ile 25 Trp Leu Cys Lys Gln Ile Leu Glu Gln Tyr Gly Glu Val Ser Met Leu Asp Ile Lys Gly Ala Asp Ala Thr Lys Val Val Leu Val Ile Gly Ile Met Thr Leu His Ser Phe Gly Glu Gly Ser Gly Val Gly Val Ser Phe Ala Gly Ser Lys Gly Phe Ser Gln Gly Leu Leu Val Thr Leu Ala Ile 90 Ala Val His Asn Ile Pro Glu Gly Leu Ala Val Ser Met Val Leu Ala 105 110 Ser Arg Gly Val Ser Pro Gln Asn Ala Met Leu Trp Ser Ile Ile Thr 120 125 Ser Leu Pro Gln Pro Leu Val Ala Val Pro Ala Phe Leu Cys Ala Asp 135 140 Ala Phe Ser Lys Phe Leu Pro Phe Cys Thr Gly Phe Ala Ala Gly Cys 150 155 Met Ile Trp Met Val Ile Ala Glu Val Leu Pro Asp Ala Phe Lys Glu 165 170 Ala Ser Pro Ser Gln Val Ala Ser Ala Ala Thr Ile Ser Val Ala Ser 185 Met Glu Ala Leu Ser Thr Leu Phe Glu Ser Phe Thr His Asp Tyr Asn 195 200 Ser Glu Asp Ala Ser Gly Phe Phe Val Ser Leu Leu Phe Gly Leu Gly 215 Pro Leu Gly Gly Val Phe Leu Val 230 (2) INFORMATION FOR SEQ ID NO:79: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 187 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..187 (D) OTHER INFORMATION: / Ceres Seq. ID 1481583 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:79: Met Leu Asp Ile Lys Gly Ala Asp Ala Thr Lys Val Val Leu Val Ile 10 Gly Ile Met Thr Leu His Ser Phe Gly Glu Gly Ser Gly Val Gly Val 20 25 Ser Phe Ala Gly Ser Lys Gly Phe Ser Gln Gly Leu Leu Val Thr Leu 40

Ala Ile Ala Val His Asn Ile Pro Glu Gly Leu Ala Val Ser Met Val

Leu Ala Ser Arg Gly Val Ser Pro Gln Asn Ala Met Leu Trp Ser Ile

75

55

70

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Ile Thr Ser Leu Pro Gln Pro Leu Val Ala Val Pro Ala Phe Leu Cys
Ala Asp Ala Phe Ser Lys Phe Leu Pro Phe Cys Thr Gly Phe Ala Ala
                                105
Gly Cys Met Ile Trp Met Val Ile Ala Glu Val Leu Pro Asp Ala Phe
                            120
Lys Glu Ala Ser Pro Ser Gln Val Ala Ser Ala Ala Thr Ile Ser Val
                        135
Ala Ser Met Glu Ala Leu Ser Thr Leu Phe Glu Ser Phe Thr His Asp
                    150
                                        155
Tyr Asn Ser Glu Asp Ala Ser Gly Phe Phe Val Ser Leu Leu Phe Gly
                165
                                    170
Leu Gly Pro Leu Leu Gly Gly Val Phe Leu Val
            180
                                185
```

- (2) INFORMATION FOR SEQ ID NO:80:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1180 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1180
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481596
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:80: acaattctaa aaccctaatc tcacaaaaaa ccctaatctc acaaaaaccc tcctcttc 60 atcgacatct ctctttcact gcttcaatgg cgtcttttga gcgttttgac gacatgtgtg 120 acctgagatt gaaacctaac attctccgaa accttctctc cgaatatgtt cccaacgaga 180 agcagcetet caccaacttt ctateactet ccaaggttgt atcaaccate tecacacaca 240 agctcttatc tgagtctcct ccagcttcaa ttgaccagaa gcttcatgct aaatcgaaat 300 cagccgttga tgattgggtt gctagattat cagctttgat ttcttctgat atgccggata 360 aaagctgggt gggtatttgt ttgattggag taacatgtca agaatgtagc tcagatcgtt 420 tctttaagtc atactctgtt tggtttaaca gtttattatc acatcttaag aatccagcaa 480 gttctagaat tgtccgagtg gcttcatgta cctcaatctc tgatctactt acaaggctgt 540 ctagattttc gaatacgaag aaagatgcag tttcacacgc ttcgaaacta atcctgccta 600 tcattaaatt attggatgaa gattcttcag aagcactatt ggaaggcatt gtccatctgc 660 taagtacaat tgtactcttg tttcctgctg ccttccacag taattatgac aagattgaag 720 ccgctattgc ctccaaaata ttttcggcga aaaccagttc taatatgtta aagaaatttg 780 cccactttct agcattgctc cccaaagcta aaggtgacga gggcacctgg tccttgatga 840 tgcaaaagct gctgatatct ataaacgtac atttaaataa tttttccaa ggtctagaag 900 aagaaacaaa aggaacaaaa gcaatccaac gattgactcc tcctggaaaa gactctcctt 960 tgcccctcgg aggtcaaaat gggggattgg atgatgcatc atggaactct gaacaattga 1020 ttgtatccag agtttctgca cttatgttct gcacctcaac gatgttaact acctcgtaca 1080 aatccaagat taatattcca gttggctcat tgttatccct tgttgagcga gtgctgttgg 1140 tgaacggctc tctacctcga gccatgtcac ccttcatgac
- (2) INFORMATION FOR SEQ ID NO:81:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 392 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..392
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481597
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:
  Asn Ser Lys Thr Leu Ile Ser Gln Lys Thr Leu Ile Ser Gln Lys Pro

| 1      |         |       |            | _             |        |           |            |              | 10   |          |            |            |              | 1.5    |        |
|--------|---------|-------|------------|---------------|--------|-----------|------------|--------------|------|----------|------------|------------|--------------|--------|--------|
| 1      | C       | T     | TT -       | 5             | FT 2 - | T         | <b>a</b>   | <b>73.</b> - | 10   |          | <b>a</b> . |            |              | 15     | -1     |
| ser    | Ser     | ьeu   |            | Arg           | HIS    | ьeu       | ser        |              | Thr  | Ата      | ser        | Met        |              | Ser    | Phe    |
|        | _       |       | 20         | _             |        |           |            | 25           |      |          |            |            | 30           | _      |        |
| Glu    | Arg     |       | Asp        | Asp           | Met    | Cys       |            | Leu          | Arg  | Leu      | Lys        |            | Asn          | Ile    | Leu    |
|        |         | 35    |            |               |        |           | 40         |              |      |          |            | 45         |              |        |        |
| Arg    | Asn     | Leu   | Leu        | Ser           | Glu    | _         | Val        | Pro          | Asn  | Glu      | Lys        | Gln        | Pro          | Leu    | Thr    |
|        | 50      |       |            |               |        | 55        |            |              |      |          | 60         |            |              |        |        |
| Asn    | Phe     | Leu   | Ser        | Leu           | Ser    | Lys       | Val        | Val          | Ser  | Thr      | Ile        | Ser        | Thr          | His    | Lys    |
| 65     |         |       |            |               | 70     |           |            |              |      | 75       |            |            |              |        | 80     |
| Leu    | Leu     | Ser   | Glu        | Ser           | Pro    | Pro       | Ala        | Ser          | Ile  | Asp      | Gln        | Lys        | Leu          | His    | Ala    |
|        |         |       |            | 85            |        |           |            |              | 90   | _        |            | _          |              | 95     |        |
| Lys    | Ser     | Lys   | Ser        | Ala           | Val    | Asp       | Asp        | Trp          | Val  | Ala      | Arq        | Leu        | Ser          | Ala    | Leu    |
| -      |         | -     | 100        |               |        | -         | -          | 105          |      |          | _          |            | 110          |        |        |
| Ile    | Ser     | Ser   |            | Met           | Pro    | Asp       | Lvs        |              | Trp  | Val      | Glv        | Tle        |              | Leu    | Tle    |
|        |         | 115   | <u>F</u> - |               |        |           | 120        |              |      |          | 1          | 125        | 0,70         |        |        |
| Glv    | Val     |       | Cvs        | Gln           | Glu    | Cvs       |            | Ser          | Asn  | Ara      | Phe        |            | T.v.c        | Ser    | ጥላንድ   |
| 1      | 130     |       | 0,10       | <b>Q 1</b> 11 | Oru    | 135       | DCI        | DCI          | 1150 | 1119     | 140        | 1110       | <b>L</b> y 5 | DCI    | 1 y 1. |
| Ser    | Val     | Trn   | Dho        | Aen           | Sar    |           | Len        | Sar          | uic  | Ton      |            | Acn        | Dro          | λla    | Sor    |
| 145    | vuı     | 115   | 1 110      | Hon           | 150    | Deu       | Бец        | Der          | 1113 | 155      | цуз        | ASII       | FIU          | AIG    | 160    |
|        | 7 ~ ~   | т10   | 1721       | 7~~           |        | 7.7.0     | 505        | C            | mh ∞ |          | т1.        | C ~ ~      | 7            | T 0.11 |        |
| SEI    | Arg     | 116   | vai        |               | vai    | АТА       | ser        | Cys          |      | ser      | тте        | ser        | Asp          |        | ьeu    |
| mh     | 7       | T     | C          | 165           | Db     | 0         | 3          | m1           | 170  | <b>T</b> |            |            | **- 7        | 175    |        |
| THE    | Arg     | ьeu   |            | Arg           | Pne    | ser       | Asn        |              | ьуs  | ьуs      | Asp        | АТА        |              | Ser    | His    |
|        | _       | _     | 180        |               | _      |           | _ =        | 185          | _    | _        |            |            | 190          |        |        |
| Ala    | Ser     |       | Leu        | Ile           | Leu    | Pro       |            | Ile          | Lys  | Leu      | Leu        |            | Glu          | Asp    | Ser    |
|        |         | 195   |            |               |        |           | 200        |              |      |          |            | 205        |              |        |        |
| Ser    | Glu     | Ala   | Leu        | Leu           | Glu    | Gly       | Ile        | Val          | His  | Leu      | Leu        | Ser        | Thr          | Ile    | Val    |
|        | 210     |       |            |               |        | 215       |            |              |      |          | 220        |            |              |        |        |
| Leu    | Leu     | Phe   | Pro        | Ala           | Ala    | Phe       | His        | Ser          | Asn  | Tyr      | Asp        | Lys        | Ile          | Glu    | Ala    |
| 225    |         |       |            |               | 230    |           |            |              |      | 235      |            |            |              |        | 240    |
| Ala    | Ile     | Ala   | Ser        | Lys           | Ile    | Phe       | Ser        | Ala          | Lys  | Thr      | Ser        | Ser        | Asn          | Met    | Leu    |
|        |         |       |            | 245           |        |           |            |              | 250  |          |            |            |              | 255    |        |
| Lys    | Lys     | Phe   | Ala        | His           | Phe    | Leu       | Ala        | Leu          | Leu  | Pro      | Lys        | Ala        | Lys          | Gly    | Asp    |
|        |         |       | 260        |               |        |           |            | 265          |      |          |            |            | 270          |        | _      |
| Glu    | Gly     | Thr   | Trp        | Ser           | Leu    | Met       | Met        | Gln          | Lys  | Leu      | Leu        | Ile        | Ser          | Ile    | Asn    |
|        | -       | 275   | -          |               |        |           | 280        |              | -    |          |            | 285        |              |        |        |
| Val    | His     | Leu   | Asn        | Asn           | Phe    | Phe       | Gln        | Glv          | Leu  | Glu      | Glu        | Glu        | Thr          | Lvs    | Glv    |
|        | 290     |       |            |               |        | 295       |            | •            |      |          | 300        |            |              | -      | -      |
| Thr    | Lys     | Ala   | Ile        | Gln           | Arg    | Leu       | Thr        | Pro          | Pro  | Glv      | Lvs        | Asp        | Ser          | Pro    | Leu    |
| 305    | 4       |       |            |               | 310    |           |            |              |      | 315      | -1 -       | <b>L</b> - |              |        | 320    |
|        | Leu     | Glv   | Glv        | Gln           |        | Glv       | Glv        | Leu          | Asp  |          | Ala        | Ser        | Trp          | Asn    |        |
|        |         | 1     | 1          | 325           |        | 1         | 1          |              | 330  |          |            |            |              | 335    |        |
| Glu    | Gln     | Leu   | Tle        |               | Ser    | Ara       | Val        | Ser          |      | T.e.u    | Met        | Phe        | Cvs          |        | Ser    |
|        | 0       | 200   | 340        |               | 201    | 9         | ,          | 345          |      | Lou      | 1100       | 1          | 350          | ****   | DOL    |
| Thr    | Met     | T.011 |            | Thr           | Sor    | Фулт      | Luc        |              | Tare | Tlo      | Acn        | Tlo        |              | t/al   | C137   |
| TILL   | Mec     | 355   | 1111       | 1111          | Ser    | туг       | _          | Ser          | цуѕ  | TIE      | ASII       |            | PIO          | vai    | Gry    |
| C - 12 | T       |       | C          | T             | T7 = 1 | G1        | 360        | **- 1        | T    | T        |            | 365        | 01           | 0      | T      |
| ser.   | Leu     | ьeu   | ser        | ьeu           | val    |           | Arg        | ٧dl          | ьeu  | ьeu      |            | ASN        | стА          | ser    | ьeu    |
| D      | 370     | 71-   | Met        | C             | D      | 375       | M-+        |              |      |          | 380        |            |              |        |        |
|        | Arg     | нта   | мет        | ser           |        | rue       | мет        |              |      |          |            |            |              |        |        |
| 385    | TNEC    |       |            | <b>505</b>    | 390    | <b></b> - | 10.00      |              |      |          |            |            |              |        |        |
| 111    | I M H'C | IKMA1 | * 1 ( ) N  | H( )K         | SHILL  | 117 7     | 11 1 • X 2 | , .          |      |          |            |            |              |        |        |

- (2) INFORMATION FOR SEQ ID NO:82:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 364 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..364

(D) OTHER INFORMATION: / Ceres Seq. ID 1481598 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:82: Met Ala Ser Phe Glu Arg Phe Asp Asp Met Cys Asp Leu Arg Leu Lys 10 Pro Asn Ile Leu Arg Asn Leu Leu Ser Glu Tyr Val Pro Asn Glu Lys 25 Gln Pro Leu Thr Asn Phe Leu Ser Leu Ser Lys Val Val Ser Thr Ile 40 Ser Thr His Lys Leu Leu Ser Glu Ser Pro Pro Ala Ser Ile Asp Gln 55 Lys Leu His Ala Lys Ser Lys Ser Ala Val Asp Asp Trp Val Ala Arg 70 Leu Ser Ala Leu Ile Ser Ser Asp Met Pro Asp Lys Ser Trp Val Gly 85 90 Ile Cys Leu Ile Gly Val Thr Cys Gln Glu Cys Ser Ser Asp Arg Phe 105 Phe Lys Ser Tyr Ser Val Trp Phe Asn Ser Leu Leu Ser His Leu Lys 120 Asn Pro Ala Ser Ser Arg Ile Val Arg Val Ala Ser Cys Thr Ser Ile 135 Ser Asp Leu Leu Thr Arg Leu Ser Arg Phe Ser Asn Thr Lys Lys Asp 150 155 Ala Val Ser His Ala Ser Lys Leu Ile Leu Pro Ile Ile Lys Leu Leu 165 170 Asp Glu Asp Ser Ser Glu Ala Leu Leu Glu Gly Ile Val His Leu Leu 185 180 Ser Thr Ile Val Leu Leu Phe Pro Ala Ala Phe His Ser Asn Tyr Asp 200 195 Lys Ile Glu Ala Ala Ile Ala Ser Lys Ile Phe Ser Ala Lys Thr Ser 215 220 Ser Asn Met Leu Lys Lys Phe Ala His Phe Leu Ala Leu Leu Pro Lys 230 235 Ala Lys Gly Asp Glu Gly Thr Trp Ser Leu Met Met Gln Lys Leu Leu 250 245 Ile Ser Ile Asn Val His Leu Asn Asn Phe Phe Gln Gly Leu Glu Glu 265 260 Glu Thr Lys Gly Thr Lys Ala Ile Gln Arg Leu Thr Pro Pro Gly Lys 280 285 275 Asp Ser Pro Leu Pro Leu Gly Gly Gln Asn Gly Gly Leu Asp Asp Ala 295 300 Ser Trp Asn Ser Glu Gln Leu Ile Val Ser Arg Val Ser Ala Leu Met 315 310 Phe Cys Thr Ser Thr Met Leu Thr Thr Ser Tyr Lys Ser Lys Ile Asn 325 330 Ile Pro Val Gly Ser Leu Leu Ser Leu Val Glu Arg Val Leu Leu Val 345 Asn Gly Ser Leu Pro Arg Ala Met Ser Pro Phe Met 355 360

- (2) INFORMATION FOR SEQ ID NO:83:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 355 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..355
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481599

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83: Met Cys Asp Leu Arg Leu Lys Pro Asn Ile Leu Arg Asn Leu Leu Ser 10 Glu Tyr Val Pro Asn Glu Lys Gln Pro Leu Thr Asn Phe Leu Ser Leu 25 Ser Lys Val Val Ser Thr Ile Ser Thr His Lys Leu Leu Ser Glu Ser 40 Pro Pro Ala Ser Ile Asp Gln Lys Leu His Ala Lys Ser Lys Ser Ala 55 Val Asp Asp Trp Val Ala Arg Leu Ser Ala Leu Ile Ser Ser Asp Met 70 75 Pro Asp Lys Ser Trp Val Gly Ile Cys Leu Ile Gly Val Thr Cys Gln 90 Glu Cys Ser Ser Asp Arg Phe Phe Lys Ser Tyr Ser Val Trp Phe Asn 105 Ser Leu Leu Ser His Leu Lys Asn Pro Ala Ser Ser Arg Ile Val Arg 120 Val Ala Ser Cys Thr Ser Ile Ser Asp Leu Leu Thr Arg Leu Ser Arg 135 140 Phe Ser Asn Thr Lys Lys Asp Ala Val Ser His Ala Ser Lys Leu Ile 150 155 Leu Pro Ile Ile Lys Leu Leu Asp Glu Asp Ser Ser Glu Ala Leu Leu 165 170 Glu Gly Ile Val His Leu Leu Ser Thr Ile Val Leu Leu Phe Pro Ala 185 Ala Phe His Ser Asn Tyr Asp Lys Ile Glu Ala Ala Ile Ala Ser Lys 200 Ile Phe Ser Ala Lys Thr Ser Ser Asn Met Leu Lys Lys Phe Ala His 215 220 Phe Leu Ala Leu Leu Pro Lys Ala Lys Gly Asp Glu Gly Thr Trp Ser 230 235 Leu Met Met Gln Lys Leu Leu Ile Ser Ile Asn Val His Leu Asn Asn 245 250 Phe Phe Gln Gly Leu Glu Glu Glu Thr Lys Gly Thr Lys Ala Ile Gln 265 Arg Leu Thr Pro Pro Gly Lys Asp Ser Pro Leu Pro Leu Gly Gly Gln 280 Asn Gly Gly Leu Asp Asp Ala Ser Trp Asn Ser Glu Gln Leu Ile Val 295 300 Ser Arg Val Ser Ala Leu Met Phe Cys Thr Ser Thr Met Leu Thr Thr 310 315 Ser Tyr Lys Ser Lys Ile Asn Ile Pro Val Gly Ser Leu Leu Ser Leu 325 330 Val Glu Arg Val Leu Leu Val Asn Gly Ser Leu Pro Arg Ala Met Ser 345 350 Pro Phe Met

355

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 1724 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1724
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481613
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

attcaacctc tctacttcag tttctctgtc cccatttttc atctgagagt taaaactgta 60 acctcaaaat ctgagataaa gtcaaaaaaa aaaccccagt ttatgattct cattttctct 120 ttataatcga aagcttcgat ttttaacaaa acccagaatc tgtgttcttg tttttttt 180 tttttggtga gagttatctt ttttttttt ggaatattgg gtgagaatct gagtaatggg 240 atttacataa aatattctat gtaaabacta aaataatctg gaaattatta aatttccaaa 300 ctttgtgttc cattttgtgg actcaaattt gtttataaag atctcaaatc agagagattg 360 agacgaccaa gaacaagcag aagaagaaga agaattgaga gaatgtggtg gtggtcttct 420 tcaactaaag gtcgttcgaa tctggagagg tttcttttag gaatcactcc taagcctcct 480 tecttetete tteeteagga acagggaaag gaggagattg agtattteag gettgatgat 540 ctctgggatt gttatgatga gatgagtgcg tatggctttg gcacacaggt tgatttaaac 600 aatggcgaaa ccgttatgca gtactacgtc ccgtacctat ccqctatcca aatccacact 660 aacaaacccg ccttgctttc caggaaccag aatgaggtgg ctgaatctga gagtagcgag 720 ggttggagcg atagtgagag tgaaaagttg ttgtcaaggt caatgagcaa tgattcaagc 780 aaaacatggg atgctgtctc tgaagattcg gttttcgatc cggatggttc accgttgctg 840 aaagatagac ttggtaacct tgactttaag tacattgaaa gagatcctcc gcacaagcgg 900 attcccttaa ccgacaagat aaacgtattg gtggagaaat atccgggact catgacctta 960 aggagtgtcg acatgtctcc tgcaagttgg atggctgttg cgtggtaccc gatataccac 1020 atcccaacct gcaggaacga gaaagatttg acgacaggct tcctaactta tcatactcta 1080 tcttcgtctt ttcaagataa tgtggtggaa ggagatcaaa gcaacaacaa tgaagaaaca 1140 gagttttgtg aagattccgt aataaacaag agaatgccat tgcctccgtt tggtgtaaca 1200 acttacaaaa tgcaaggaga tctttggggg aagacggggt ttgaccagga ccggttgctt 1260 tatcttcaaa gcgctgcgga ttcatggctg aaacagctca atgttgatca ccatqactat 1320 aacttcttcc ttaactcgag cttctaaaga tcaatcgggt cgttcgtatg tttatccttc 1380 tccaaacctt aaacaaaaaa aaaaagacct cataaccctt tttctttgtt gttttcaagc 1440 tccttttgtt tctctgtgtt ttttgttctt tttgtttttg tctggctcgt tqtqttqttt 1500 taggtagcaa ccgccatcgc ggagtttttt ctccttttqc aaqccaatca tqqaaqtttc 1560 taagaagaaa acagagcttt tttttctttt tttttaacgg tgttgagaaa acaagaaagt 1620 tgttttcttt tcttgggtga gagatcatgt aaattgacct tgaacagagg actctgtttt 1680 gtacttttct gtctaaaata tataaaaaaa tctgtctttc ttgt

- (2) INFORMATION FOR SEQ ID NO:85:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 314 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

130

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..314
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481614

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85: Met Trp Trp Trp Ser Ser Ser Thr Lys Gly Arg Ser Asn Leu Glu Arg 10 Phe Leu Leu Gly Ile Thr Pro Lys Pro Pro Ser Phe Ser Leu Pro Gln 25 Glu Gln Gly Lys Glu Glu Ile Glu Tyr Phe Arg Leu Asp Asp Leu Trp 40 Asp Cys Tyr Asp Glu Met Ser Ala Tyr Gly Phe Gly Thr Gln Val Asp 55 Leu Asn Asn Gly Glu Thr Val Met Gln Tyr Tyr Val Pro Tyr Leu Ser 70 75 Ala Ile Gln Ile His Thr Asn Lys Pro Ala Leu Leu Ser Arg Asn Gln 90 Asn Glu Val Ala Glu Ser Glu Ser Ser Glu Gly Trp Ser Asp Ser Glu 105 110 Ser Glu Lys Leu Leu Ser Arg Ser Met Ser Asn Asp Ser Ser Lys Thr 115 120 125 Trp Asp Ala Val Ser Glu Asp Ser Val Phe Asp Pro Asp Gly Ser Pro

140

135

Leu Leu Lys Asp Arg Leu Gly Asn Leu Asp Phe Lys Tyr Ile Glu Arg 150 155 Asp Pro Pro His Lys Arg Ile Pro Leu Thr Asp Lys Ile Asn Val Leu 165 170 Val Glu Lys Tyr Pro Gly Leu Met Thr Leu Arg Ser Val Asp Met Ser 180 185 Pro Ala Ser Trp Met Ala Val Ala Trp Tyr Pro Ile Tyr His Ile Pro 200 205 Thr Cys Arg Asn Glu Lys Asp Leu Thr Thr Gly Phe Leu Thr Tyr His 215 220 Thr Leu Ser Ser Ser Phe Gln Asp Asn Val Val Glu Gly Asp Gln Ser 230 235 Asn Asn Glu Glu Thr Glu Phe Cys Glu Asp Ser Val Ile Asn Lys 245 250 Arg Met Pro Leu Pro Pro Phe Gly Val Thr Thr Tyr Lys Met Gln Gly 265 Asp Leu Trp Gly Lys Thr Gly Phe Asp Gln Asp Arg Leu Leu Tyr Leu 280 Gln Ser Ala Ala Asp Ser Trp Leu Lys Gln Leu Asn Val Asp His His 295 300 Asp Tyr Asn Phe Phe Leu Asn Ser Ser Phe 310

- (2) INFORMATION FOR SEQ ID NO:86:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 261 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..261
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481615

2.5

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:
- Met Ser Ala Tyr Gly Phe Gly Thr Gln Val Asp Leu Asn Asn Gly Glu
- 10 Thr Val Met Gln Tyr Tyr Val Pro Tyr Leu Ser Ala Ile Gln Ile His
- Thr Asn Lys Pro Ala Leu Leu Ser Arg Asn Gln Asn Glu Val Ala Glu 40
- Ser Glu Ser Ser Glu Gly Trp Ser Asp Ser Glu Ser Glu Lys Leu Leu 55
- Ser Arg Ser Met Ser Asn Asp Ser Ser Lys Thr Trp Asp Ala Val Ser 75
- Glu Asp Ser Val Phe Asp Pro Asp Gly Ser Pro Leu Leu Lys Asp Arg 90 85
- Leu Gly Asn Leu Asp Phe Lys Tyr Ile Glu Arg Asp Pro Pro His Lys 105
- Arg Ile Pro Leu Thr Asp Lys Ile Asn Val Leu Val Glu Lys Tyr Pro 120
- Gly Leu Met Thr Leu Arg Ser Val Asp Met Ser Pro Ala Ser Trp Met 135 140
- Ala Val Ala Trp Tyr Pro Ile Tyr His Ile Pro Thr Cys Arg Asn Glu
- 150 155 Lys Asp Leu Thr Thr Gly Phe Leu Thr Tyr His Thr Leu Ser Ser Ser
- 165 170 Phe Gln Asp Asn Val Val Glu Gly Asp Gln Ser Asn Asn Glu Glu 180 185
- Thr Glu Phe Cys Glu Asp Ser Val Ile Asn Lys Arg Met Pro Leu Pro

195 200 205

Pro Phe Gly Val Thr Thr Tyr Lys Met Gln Gly Asp Leu Trp Gly Lys 210 220

Thr Gly Phe Asp Gln Asp Arg Leu Leu Tyr Leu Gln Ser Ala Ala Asp 225 235

Ser Trp Leu Lys Gln Leu Asn Val Asp His His Asp Tyr Asn Phe Phe 245 250 255

Leu Asn Ser Ser Phe

260

- (2) INFORMATION FOR SEQ ID NO:87:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 243 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..243
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481616
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:
- Met Gln Tyr Tyr Val Pro Tyr Leu Ser Ala Ile Gln Ile His Thr Asn

  1 10 15
- Lys Pro Ala Leu Leu Ser Arg Asn Gln Asn Glu Val Ala Glu Ser Glu 20 25 30
- Ser Ser Glu Gly Trp Ser Asp Ser Glu Ser Glu Lys Leu Leu Ser Arg 35 40 45
- Ser Met Ser Asn Asp Ser Ser Lys Thr Trp Asp Ala Val Ser Glu Asp 50 55 60
  Ser Val Phe Asp Pro Asp Gly Ser Pro Leu Leu Lys Asp Arg Leu Gly
- 65 70 75 80
  Asn Leu Asp Phe Lys Tyr Ile Glu Arg Asp Pro Pro His Lys Arg Ile
- 85 90 95
  Pro Leu Thr Asp Lys Ile Asn Val Leu Val Glu Lys Tyr Pro Gly Leu
  100 105 110
- Met Thr Leu Arg Ser Val Asp Met Ser Pro Ala Ser Trp Met Ala Val 115 120 125
- Ala Trp Tyr Pro Ile Tyr His Ile Pro Thr Cys Arg Asn Glu Lys Asp
- 130 135 140
  Leu Thr Thr Gly Phe Leu Thr Tyr His Thr Leu Ser Ser Phe Gln
- 145 150 155 160
  Asp Asn Val Val Glu Gly Asp Gln Ser Asn Asn Asn Glu Glu Thr Glu
- 165 170 175
  Phe Cys Glu Asp Ser Val Ile Asn Lys Arg Met Pro Leu Pro Pro Phe
- 180 185 190
  Gly Val Thr Thr Tyr Lys Met Gln Gly Asp Leu Trp Gly Lys Thr Gly
- 195 200 205
  Phe Asp Gln Asp Arg Leu Leu Tyr Leu Gln Ser Ala Ala Asp Ser Trp
  210 215 220
- Leu Lys Gln Leu Asn Val Asp His His Asp Tyr Asn Phe Phe Leu Asn 225 230 235 240

Ser Ser Phe

- (2) INFORMATION FOR SEQ ID NO:88:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1235 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1235
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481621
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:88: attgacccaa cgcttcttct ccggcacgac tgttcagagt tcgatttcca ttttcgggtc 60 gaaaggttga ttttatttgg attttggatg gtagattcag ttcctaaaca taggaaactt 120 gaatctcaga gtttttcgag ttagggataa gagaaagaaa cacagttgga gttatactga 180 tgaatggagg aggctcgagt agtttgcgtt cagcattgtc ctattgtgtg cagcaagtac 240 gaaactatga ctatcatcac tacctctgtc tccttgaact cccaactgag atgcgtaaag 300 cagcatttgc tctccqqqct tttaatqtag aaaccgcaag agccatggat gttgcatctg 360 atcccaaaat cggcttgatg cggttacttt ggtggcaaga agcaattgac aaactctaca 420 ccaaaaaqcc cataaaccat ccaqctqcac aaqctctqtc ttqqqcaata tcaqaacata 480 acatcagtaa accttggcta aaacgctcgg ttgacgctag aatccgagat gcccaaagag 540 aagtagacga tataccagag agcattgcgg agctagagaa atacgcagaa gacacagttt 600 ccactcttct gtacaataca ctccaagcag gcggaattag ttcaacaaca gctgatcatg 660 cagetteaca cattggtaaa gecagtggte ttgtettget gettaaatea ttacegtace 720 actqtaccaq aaaccqtcac caqaqttaca tccctqcaqa tctcqctqaq aaqcacqqqt 780 tqctcqtqaa acaaqqtqqa cqattaqaaa ttcttctqqa taacqattca aqaqaaqqac 840 taagcaatgt cgtgtttgag attgcatctg ttgccaatgc acatctcctg aaagcccgtg 900 aactggcggg aaaggttcct gcagaagcta aaccggtact gcttcattct gtgccggtac 960 aagttettet ggattegtta aataaagtae aattegatgt gtttgateee aggatteaaa 1020 gaggagttct tggtgttcct ccactcttgt ttcagtttaa actcaagtgg tattcatgga 1080 gagcaatgtt ttgaaaactt gtctttatct cccttttctt gcctctttta tttctggttt 1140 caaagacttt acattaaact ccagcttact tgtatttctt ttgtaataat acaaaattac 1200 aaatggtgat gaatacaaaa taaagaattt gtttc
- (2) INFORMATION FOR SEQ ID NO:89:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 304 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..304
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481622
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:
- Met Asn Gly Gly Ser Ser Ser Leu Arg Ser Ala Leu Ser Tyr Cys

  1 5 10 15

  Val Gln Gln Val Arg Asn Tyr Asp Tyr His His Tyr Leu Cys Leu Leu
  20 25 30
- Glu Leu Pro Thr Glu Met Arg Lys Ala Ala Phe Ala Leu Arg Ala Phe
  35 40 45
- Asn Val Glu Thr Ala Arg Ala Met Asp Val Ala Ser Asp Pro Lys Ile 50 60
- Gly Leu Met Arg Leu Leu Trp Trp Gln Glu Ala Ile Asp Lys Leu Tyr
  65 70 75 80
- Thr Lys Lys Pro Ile Asn His Pro Ala Ala Gln Ala Leu Ser Trp Ala 85 90 95
- Ile Ser Glu His Asn Ile Ser Lys Pro Trp Leu Lys Arg Ser Val Asp
- Ala Arg Ile Arg Asp Ala Gln Arg Glu Val Asp Asp Ile Pro Glu Ser
- Ile Ala Glu Leu Glu Lys Tyr Ala Glu Asp Thr Val Ser Thr Leu Leu 130 135 140
- Tyr Asn Thr Leu Gln Ala Gly Gly Ile Ser Ser Thr Thr Ala Asp His 145 150 155 160

Ala Ala Ser His Ile Gly Lys Ala Ser Gly Leu Val Leu Leu Lys 170 Ser Leu Pro Tyr His Cys Thr Arg Asn Arg His Gln Ser Tyr Ile Pro 180 185 Ala Asp Leu Ala Glu Lys His Gly Leu Leu Val Lys Gln Gly Gly Arg 200 Leu Glu Ile Leu Leu Asp Asn Asp Ser Arg Glu Gly Leu Ser Asn Val 215 220 Val Phe Glu Ile Ala Ser Val Ala Asn Ala His Leu Leu Lys Ala Arg 230 235 Glu Leu Ala Gly Lys Val Pro Ala Glu Ala Lys Pro Val Leu Leu His 250 Ser Val Pro Val Gln Val Leu Leu Asp Ser Leu Asn Lys Val Gln Phe 265 Asp Val Phe Asp Pro Arg Ile Gln Arg Gly Val Leu Gly Val Pro Pro 280 285 Leu Leu Phe Gln Phe Lys Leu Lys Trp Tyr Ser Trp Arg Ala Met Phe 295 300

- (2) INFORMATION FOR SEQ ID NO:90:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 267 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..267
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481623
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:
- Met Arg Lys Ala Ala Phe Ala Leu Arg Ala Phe Asn Val Glu Thr Ala 1 5 10 15
- Arg Ala Met Asp Val Ala Ser Asp Pro Lys Ile Gly Leu Met Arg Leu
  20 25 30
- Leu Trp Trp Gln Glu Ala Ile Asp Lys Leu Tyr Thr Lys Lys Pro Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$  Asn His Pro Ala Ala Gln Ala Leu Ser Trp Ala Ile Ser Glu His Asn
- 50 55 60

  Ile Ser Lys Pro Trp Leu Lys Arg Ser Val Asp Ala Arg Ile Arg Asp
- 65 70 75 80
  Ala Gln Arg Glu Val Asp Asp Ile Pro Glu Ser Ile Ala Glu Leu Glu
- 85 90 95
  Lys Tyr Ala Glu Asp Thr Val Ser Thr Leu Leu Tyr Asn Thr Leu Gln
- 100 105 110 Ala Gly Gly Ile Ser Ser Thr Thr Ala Asp His Ala Ala Ser His Ile
- 115 120 125
  Gly Lys Ala Ser Gly Len Val Len Len Lys Ser Len Pro Tyr Hig
- Gly Lys Ala Ser Gly Leu Val Leu Leu Leu Lys Ser Leu Pro Tyr His 130 135 140
- Cys Thr Arg Asn Arg His Gln Ser Tyr Ile Pro Ala Asp Leu Ala Glu 145 150 155 160
- Lys His Gly Leu Leu Val Lys Gln Gly Gly Arg Leu Glu Ile Leu Leu 165 170 175
- Asp Asn Asp Ser Arg Glu Gly Leu Ser Asn Val Val Phe Glu Ile Ala 180 185 190
- Ser Val Ala Asn Ala His Leu Leu Lys Ala Arg Glu Leu Ala Gly Lys 195 200 205
- Val Pro Ala Glu Ala Lys Pro Val Leu Leu His Ser Val Pro Val Gln

|  | 210                         | )          |                   |             |        | 215        |            |            |       |       | 220        | ١          |            |             |            |
|--|-----------------------------|------------|-------------------|-------------|--------|------------|------------|------------|-------|-------|------------|------------|------------|-------------|------------|
| Va]  |                             |            | ı Ası             | Ser         | Leu    |            |            | Val        | Glr   | n Phe |            |            | Dhe        | Acr         | Pro        |
| 225  | ,                           |            | - 1               |             | 230    | )          |            | , , , ,    | . 011 | 235   |            | , vai      | . FILE     | . ASL       | 240        |
| Arc  | Ile                         | e Glr      | n Arc             | Gly<br>245  | v Val  | Leu        | Gly        | Val        | Pro   | Pro   |            | ı Leu      | Phe        | Gln<br>255  | Phe        |
| Lys  | Leu                         | Lys        | Trp<br>260        | y Tyr       | Ser    | Trp        | Arg        | Ala<br>265 | Met   |       | :          |            |            | 233         |            |
| (2)  | INF                         | ORMA       |                   | ,<br>FOF    | SEC    | ) TD       | NO: 9      |            |       |       |            |            |            |             |            |
| , ,  |                             |            |                   | ICE C       |        |            |            |            |       |       |            |            |            |             |            |
|  | •                           |            |                   | ENGI        |        |            |            |            | ds    |       |            |            |            |             |            |
|  |                             |            |                   | YPE:        |        |            |            |            |       |       |            |            |            |             |            |
| (C) STRANDEDNESS:                                  |                             |            |                   |             |        |            |            |            |       |       |            |            |            |             |            |
|  | (D) TOPOLOGY: linear        |            |                   |             |        |            |            |            |       |       |            |            |            |             |            |
|  | (ii) MOLECULE TYPE: peptide |            |                   |             |        |            |            |            |       |       |            |            |            |             |            |
| <pre>(ix) FEATURE:     (A) NAME/KEY: peptide</pre> |                             |            |                   |             |        |            |            |            |       |       |            |            |            |             |            |
|  |                             |            |                   |             |        |            |            |            |       |       |            |            |            |             |            |
|  |                             |            |                   | OCAT        |        |            |            | ,          | _     | _     |            |            |            |             |            |
|  | (vi                         | ) CE       | ט (ע              | THER        | ECCD.  | URMA       | TION       | : / '      | Cere  | s Se  | q. I       | D 14       | 8162       | 4           |            |
| Met  | Asp                         | Val        | N. ΔO.<br>A. I. Δ | CE D<br>Ser | LOCK   | Dro        | ON:        | SEQ<br>Tla | TD N  | 0:91  | :<br>Mat   | 7          | T          | -           | _          |
| 1  | шър                         | Val        | ALU               | 5           | тэр    | FIO        | гуу        | тте        | 10    | ьeu   | мет        | Arg        | ьeu        |             | Trp        |
| Trp  | Gln                         | Glu        | Ala<br>20         | Ile         | Asp    | Lys        | Leu        |            |       | Lys   | Lys        | Pro        |            | 15<br>Asn   | His        |
| Pro  | Ala                         | Ala        |                   | Ala         | T.e.11 | Sor        | Trn        | 25<br>31a  | T10   | cor   | C1         | rri -      | 30         | <b>-</b> 1- | <b>a</b> - |
|  |                             | 35         |                   |             |        |            | 40         |            |       |       |            | 45         |            |             |            |
|  | 50                          |            |                   | Lys         |        | 55         |            |            |       |       | 60         |            |            |             |            |
| 65   |                             |            |                   | Asp         | 70     |            |            |            |       | 75    |            |            |            | _           | 80         |
|  |                             |            |                   | Val<br>85   |        |            |            |            | 90    |       |            |            |            | 95          |            |
| Gly  | Ile                         | Ser        | Ser<br>100        | Thr         | Thr    | Ala        | Asp        | His<br>105 | Ala   | Ala   | Ser        | His        | Ile<br>110 | Gly         | Lys        |
| Ala  | Ser                         | Gly<br>115 | Leu               | Val         | Leu    | Leu        | Leu<br>120 | Lys        | Ser   | Leu   | Pro        | Tyr<br>125 | His        | Cys         | Thr        |
| Arg  | Asn<br>130                  | Arg        | His               | Gln         | Ser    | Tyr<br>135 | Ile        | Pro        | Ala   | Asp   | Leu<br>140 | Ala        | Glu        | Lys         | His        |
| Gly  | Leu                         | Leu        | Val               | Lys         | Gln    | Gly        | Gly        | Arg        | Leu   | Glu   |            | Leu        | Leu        | Asp         | Asn        |
| 145  |                             |            |                   |             | 150    |            |            |            |       | 155   |            |            |            |             | 160        |
|  |                             |            |                   | Gly<br>165  |        |            |            |            | 170   |       |            |            |            | 175         |            |
| Ala  | Asn                         | Ala        | His<br>180        | Leu         | Leu    | Lys        | Ala        | Arg<br>185 | Glu   | Leu   | Ala        | Gly        | Lys<br>190 | Val         | Pro        |
| Ala  | Glu                         | Ala<br>195 | Lys               | Pro         | Val    | Leu        | Leu<br>200 |            | Ser   | Val   | Pro        | Val<br>205 | Gln        | Val         | Leu        |
| Leu  | Asp<br>210                  |            | Leu               | Asn         | Lys    | Val<br>215 |            | Phe        | Asp   | Val   |            | Asp        | Pro        | Arg         | Ile        |
| G] n   | _                           | G] v       | Val               | Leu         | Glv    |            | Dro        | Dro        | Leu   | Len   | 220<br>Bho | C1~        | Dh a       | T           | T          |
| 225  | 3                           | 1          |                   | Leu         | 230    | vuı        | 110        | 110        | ⊐eu   | 235   | rne        | GTII       | F116       | ьys         |            |
|  | Trp                         | Tyr        | Ser               | Trp<br>245  |        | Ala        | Met        | Phe        |       | رري   |            |            |            |             | 240        |
| (2)  | TNEC                        | יי או כדו  | TON               | EOD 243     | CEO    | TD **      |            |            |       |       |            |            |            |             |            |

- (2) INFORMATION FOR SEQ ID NO:92:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1232 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..1232
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481625
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92: ctctctcgcg ttcgttctta tccacgagct ctgcaccgtc gcaatctccg tcttctccat 60 ttagatccaa cacagagcct tttctacatg aaattcggca aagagtttcg tactcacctc 120 gaagaaactt taccagagtg gagagacaag ttcctttgct ataaaccttt aaaaaagctt 180 ctcaaatatt atccttatta ctccgccgat tttggacccg ccaattccga tcacaacgat 240 tegegtecag tatttgetga tactactaac atetetteeg cegeegacga eggeggtgtg 300 gttcccggcg tcaggccatc ggaagatctc cagggttcgt ttgtgaggat acttaacgat 360 gaacttgaga agtttaacga tttttacgtt gataaggaag aagatttcgt tatcagatta 420 480 agtgagttca gcgaagaaat gatggatatt cggagagacc ttgttaccat tcatggcgag 540 atggtgctcc tgaaaaacta cagctccctt aattttgcag gacttgtcaa gattttgaag 600 aagtacgata aaagaacagg tggactttta cgtttgcctt tcacacagct tgttctccat 660 caaccettet ttactacaga gecaettaet aggttagtee gtgaatgtga ggecaatett 720 gagcttcttt ttccttcaga agcggaagtt gtagagtctt ctagcgcagt gcaagcacac 780 tcaagctcac atcagcacaa ctccccaaga atctcagctg agacttcctc aactctcggc 840 aatgaaaatc ttgatatata taagagtaca ctcgctgcaa tgagagctat aagagggtta 900 caaaaggcta gctcgacgta caacccttta tcattctcat cgcttcttca gaacgaggat 960 gatgagacgg taacagctga aaactctcca aactctggga acaaagatga ttcagagaag 1020 gaagatactg gaccttccca ctgatcagaa gagaatgatg ctctttttga tcaagatttt 1080 gagaatttgc ttcttgattt caccctaact tttcataaaa ttaacacatt ttactttact 1140 tetteacett ttgcaggaca caacttetgt atgcatttga attttagtae agtegtttat 1200 agattttcaa tgaaattttc ctccattgtc gc
- (2) INFORMATION FOR SEQ ID NO:93:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 347 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..347
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481626
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93: Leu Ser Arg Val Arg Ser Tyr Pro Arg Ala Leu His Arg Arg Asn Leu 1 5 10 Arg Leu Leu His Leu Asp Pro Thr Gln Ser Leu Phe Tyr Met Lys Phe 20 25 Gly Lys Glu Phe Arg Thr His Leu Glu Glu Thr Leu Pro Glu Trp Arg 35 40 Asp Lys Phe Leu Cys Tyr Lys Pro Leu Lys Lys Leu Leu Lys Tyr Tyr 55 Pro Tyr Tyr Ser Ala Asp Phe Gly Pro Ala Asn Ser Asp His Asn Asp 70 75 Ser Arg Pro Val Phe Ala Asp Thr Thr Asn Ile Ser Ser Ala Ala Asp 85 90 Asp Gly Gly Val Val Pro Gly Val Arg Pro Ser Glu Asp Leu Gln Gly 105 Ser Phe Val Arg Ile Leu Asn Asp Glu Leu Glu Lys Phe Asn Asp Phe 120 125 Tyr Val Asp Lys Glu Glu Asp Phe Val Ile Arg Leu Gln Glu Leu Lys 135 140 Glu Arg Ile Glu Gln Val Lys Glu Lys Asn Gly Glu Phe Ala Ser Glu 150 155 Ser Glu Phe Ser Glu Glu Met Met Asp Ile Arg Arg Asp Leu Val Thr

170

Ile His Gly Glu Met Val Leu Leu Lys Asn Tyr Ser Ser Leu Asn Phe 180 185 Ala Gly Leu Val Lys Ile Leu Lys Lys Tyr Asp Lys Arg Thr Gly Gly 200 Leu Leu Arg Leu Pro Phe Thr Gln Leu Val Leu His Gln Pro Phe Phe 215 220 Thr Thr Glu Pro Leu Thr Arg Leu Val Arg Glu Cys Glu Ala Asn Leu 230 235 Glu Leu Leu Phe Pro Ser Glu Ala Glu Val Val Glu Ser Ser Ala 250 Val Gln Ala His Ser Ser Ser His Gln His Asn Ser Pro Arg Ile Ser 265 Ala Glu Thr Ser Ser Thr Leu Gly Asn Glu Asn Leu Asp Ile Tyr Lys 280 285 Ser Thr Leu Ala Ala Met Arg Ala Ile Arg Gly Leu Gln Lys Ala Ser 295 300 Ser Thr Tyr Asn Pro Leu Ser Phe Ser Ser Leu Leu Gln Asn Glu Asp 310 315 Asp Glu Thr Val Thr Ala Glu Asn Ser Pro Asn Ser Gly Asn Lys Asp 325 330 Asp Ser Glu Lys Glu Asp Thr Gly Pro Ser His 340 345

- (2) INFORMATION FOR SEQ ID NO:94:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 318 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..318
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481627
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:
- Met Lys Phe Gly Lys Glu Phe Arg Thr His Leu Glu Glu Thr Leu Pro  $1 \\ 5 \\ 10 \\ 15$  Glu Trp Arg Asp Lys Phe Leu Cys Tyr Lys Pro Leu Lys Lys Leu Leu
- 20 25 30 Lys Tyr Tyr Pro Tyr Tyr Ser Ala Asp Phe Gly Pro Ala Asn Ser Asp 35 40 45
- His Asn Asp Ser Arg Pro Val Phe Ala Asp Thr Thr Asn Ile Ser Ser 50 55 60
- Ala Ala Asp Asp Gly Gly Val Val Pro Gly Val Arg Pro Ser Glu Asp 65 70 75 80
- Leu Gln Gly Ser Phe Val Arg Ile Leu Asn Asp Glu Leu Glu Lys Phe
- Asn Asp Phe Tyr Val Asp Lys Glu Glu Asp Phe Val Ile Arg Leu Gln
  100 105 110
- Glu Leu Lys Glu Arg Ile Glu Gln Val Lys Glu Lys Asn Gly Glu Phe
  115 120 125
- Ala Ser Glu Ser Glu Phe Ser Glu Glu Met Met Asp Ile Arg Asp 130 135 140
- Leu Val Thr Ile His Gly Glu Met Val Leu Leu Lys Asn Tyr Ser Ser
- Thr Gly Gly Leu Leu Arg Leu Pro Phe Thr Gln Leu Val Leu His Gln
  180 185 190
- Pro Phe Phe Thr Thr Glu Pro Leu Thr Arg Leu Val Arg Glu Cys Glu

200 205 Ala Asn Leu Glu Leu Leu Phe Pro Ser Glu Ala Glu Val Val Glu Ser 215 220 Ser Ser Ala Val Gln Ala His Ser Ser Ser His Gln His Asn Ser Pro 230 235 Arg Ile Ser Ala Glu Thr Ser Ser Thr Leu Gly Asn Glu Asn Leu Asp 245 250 Ile Tyr Lys Ser Thr Leu Ala Ala Met Arg Ala Ile Arg Gly Leu Gln 265 Lys Ala Ser Ser Thr Tyr Asn Pro Leu Ser Phe Ser Ser Leu Leu Gln 275 280 Asn Glu Asp Asp Glu Thr Val Thr Ala Glu Asn Ser Pro Asn Ser Gly 295 Asn Lys Asp Asp Ser Glu Lys Glu Asp Thr Gly Pro Ser His 310 (2) INFORMATION FOR SEQ ID NO:95: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 181 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..181 (D) OTHER INFORMATION: / Ceres Seq. ID 1481628

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95: Met Met Asp Ile Arg Arg Asp Leu Val Thr Ile His Gly Glu Met Val 1 10 Leu Leu Lys Asn Tyr Ser Ser Leu Asn Phe Ala Gly Leu Val Lys Ile Leu Lys Lys Tyr Asp Lys Arg Thr Gly Gly Leu Leu Arg Leu Pro Phe Thr Gln Leu Val Leu His Gln Pro Phe Phe Thr Thr Glu Pro Leu Thr Arg Leu Val Arg Glu Cys Glu Ala Asn Leu Glu Leu Leu Phe Pro Ser 75 Glu Ala Glu Val Val Glu Ser Ser Ala Val Gln Ala His Ser Ser 85 90 Ser His Gln His Asn Ser Pro Arg Ile Ser Ala Glu Thr Ser Ser Thr 105 Leu Gly Asn Glu Asn Leu Asp Ile Tyr Lys Ser Thr Leu Ala Ala Met 120 Arg Ala Ile Arg Gly Leu Gln Lys Ala Ser Ser Thr Tyr Asn Pro Leu 135 140 Ser Phe Ser Ser Leu Leu Gln Asn Glu Asp Asp Glu Thr Val Thr Ala 150 155 Glu Asn Ser Pro Asn Ser Gly Asn Lys Asp Asp Ser Glu Lys Glu Asp 165 Thr Gly Pro Ser His 180

(2) INFORMATION FOR SEQ ID NO:96:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 1217 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..1217
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481632
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:96: actccaaaat gaggacgcgc cggcaaacat atccgccgat cgctgaatcc ctcacggcga

60 ggtccattgt tcaggcgctt ccggcgtcag ccacaatatc aggaaatggt ggaccaaaqa 120 agaagaagaa ctgtgttaat agaggattgt gggataaaca gattccgacg qatctqctqc 180 aagagatact gtcttgcctc ggattaaaaag ccaacataca tgcttctctc gtctgcaaga 240 catggcttaa agaagctgtt tctgtcagga agtttcagag tcgtccttgg cttttttatc 300 cacagagtca gagaggagga ccaaaagaag gagactacgt tctctttaac ccatcacggt 360 ctcaaacaca tcacctcaag tttccagagt taacgggcta cagaaataaa ttagcttgtg 420 ctaaggatgg ttggttgctt gtggtaaaag ataaccccga tgtggtcttc tttcttaacc 480 cgtttaccgg ggaacgcatc tgcttacccc aggtgccaca aaattccaca cgcgattgct 540 taactttctc agccgctccc acatcaacta gttgttgcgt catatccttc acccctcaaa 600 gttttcttta cgcagttgtt aaagttgata cttggcgccc tggtgaatcc gtatggacca 660 ctcatcactt tgatcaaaag cgttacggtg aggtaatcaa tagatgtatc ttctccaatg 720 gtatgttcta ttgtctcagt accagtggcc gcctctcgtt tttcgacccg tctagagaaa 780 cctggaatgt tcttccagtg aaaccatgtc qqqcctttcq tcqtaaaatt atqcttqtqa 840 ggcaagtatt catgacagag catgaaggag acatctttgt tgtgactaca cgccgcgtaa 900 acaacagaaa actgttggcc tttaaactaa accttcaagg caatgtgtgg gaagagatga 960 aagtacctaa tggcttgaca gtattttcaa gtgacgctac ctctttaaca aqagctqqtc 1020 ttccagagga ggagaggaac attctatatt catcggatat cgatgatttt gtgaaaagct 1080 ctcatccaac tttctattat tatgactgca gcgcttggct ccagccacct catgacaatt 1140 ttaatttttg actatcatcc ttaagtgttt ttgtttttga aaaaacatgt tttaatacct 1200 tttaaagctt ttgattc

- (2) INFORMATION FOR SEQ ID NO:97:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 382 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..382
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481633
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:
- Ser Lys Met Arg Thr Arg Arg Gln Thr Tyr Pro Pro Ile Ala Glu Ser 10 Leu Thr Ala Arg Ser Ile Val Gln Ala Leu Pro Ala Ser Ala Thr Ile
- 25 Ser Gly Asn Gly Gly Pro Lys Lys Lys Asn Cys Val Asn Arg Gly
- 40 Leu Trp Asp Lys Gln Ile Pro Thr Asp Leu Leu Gln Glu Ile Leu Ser 55
- Cys Leu Gly Leu Lys Ala Asn Ile His Ala Ser Leu Val Cys Lys Thr
- 70 75 Trp Leu Lys Glu Ala Val Ser Val Arg Lys Phe Gln Ser Arg Pro Trp 85 90
- Leu Phe Tyr Pro Gln Ser Gln Arg Gly Gly Pro Lys Glu Gly Asp Tyr 105
- Val Leu Phe Asn Pro Ser Arg Ser Gln Thr His His Leu Lys Phe Pro 120
- Glu Leu Thr Gly Tyr Arg Asn Lys Leu Ala Cys Ala Lys Asp Gly Trp 140 135
- Leu Leu Val Val Lys Asp Asn Pro Asp Val Val Phe Phe Leu Asn Pro 150 155
- Phe Thr Gly Glu Arg Ile Cys Leu Pro Gln Val Pro Gln Asn Ser Thr 165 170

Arg Asp Cys Leu Thr Phe Ser Ala Ala Pro Thr Ser Thr Ser Cys Cys 180 185 Val Ile Ser Phe Thr Pro Gln Ser Phe Leu Tyr Ala Val Val Lys Val 195 200 Asp Thr Trp Arg Pro Gly Glu Ser Val Trp Thr Thr His His Phe Asp 215 220 Gln Lys Arg Tyr Gly Glu Val Ile Asn Arg Cys Ile Phe Ser Asn Gly 230 235 Met Phe Tyr Cys Leu Ser Thr Ser Gly Arg Leu Ser Phe Phe Asp Pro 245 250 Ser Arg Glu Thr Trp Asn Val Leu Pro Val Lys Pro Cys Arg Ala Phe 260 265 Arg Arg Lys Ile Met Leu Val Arg Gln Val Phe Met Thr Glu His Glu 275 280 285 Gly Asp Ile Phe Val Val Thr Thr Arg Arg Val Asn Asn Arg Lys Leu 295 300 Leu Ala Phe Lys Leu Asn Leu Gln Gly Asn Val Trp Glu Glu Met Lys 310 315 Val Pro Asn Gly Leu Thr Val Phe Ser Ser Asp Ala Thr Ser Leu Thr 325 330 Arg Ala Gly Leu Pro Glu Glu Glu Arg Asn Ile Leu Tyr Ser Ser Asp 345 350 Ile Asp Asp Phe Val Lys Ser Ser His Pro Thr Phe Tyr Tyr Asp 355 360 365 Cys Ser Ala Trp Leu Gln Pro Pro His Asp Asn Phe Asn Phe 375

- (2) INFORMATION FOR SEQ ID NO:98:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 380 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..380
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481634
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:98: Met Arg Thr Arg Arg Gln Thr Tyr Pro Pro Ile Ala Glu Ser Leu Thr 10 Ala Arg Ser Ile Val Gln Ala Leu Pro Ala Ser Ala Thr Ile Ser Gly 25 Asn Gly Gly Pro Lys Lys Lys Asn Cys Val Asn Arg Gly Leu Trp 40 Asp Lys Gln Ile Pro Thr Asp Leu Leu Gln Glu Ile Leu Ser Cys Leu 55 Gly Leu Lys Ala Asn Ile His Ala Ser Leu Val Cys Lys Thr Trp Leu 75 Lys Glu Ala Val Ser Val Arg Lys Phe Gln Ser Arg Pro Trp Leu Phe 90 Tyr Pro Gln Ser Gln Arg Gly Gly Pro Lys Glu Gly Asp Tyr Val Leu 105 110 Phe Asn Pro Ser Arg Ser Gln Thr His His Leu Lys Phe Pro Glu Leu 120 125 Thr Gly Tyr Arg Asn Lys Leu Ala Cys Ala Lys Asp Gly Trp Leu Leu 135 140 Val Val Lys Asp Asn Pro Asp Val Val Phe Phe Leu Asn Pro Phe Thr 150 155 Gly Glu Arg Ile Cys Leu Pro Gln Val Pro Gln Asn Ser Thr Arg Asp

|     |     |     |      | 165 |     |      |         |     | 170 |     |     |     |     | 175 |     |
|-----|-----|-----|------|-----|-----|------|---------|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Leu | Thr | Phe  | Ser | Ala | Ala  | Pro     | Thr | Ser | Thr | Ser | Cys | Cys | Val | Ile |
|     |     |     | 180  |     |     |      |         | 185 |     |     |     |     | 190 |     |     |
| Ser | Phe | Thr | Pro  | Gln | Ser | Phe  | Leu     | Tyr | Ala | Val | Val | Lys | Val | Asp | Thr |
|     |     | 195 |      |     |     |      | 200     |     |     |     |     | 205 |     |     |     |
| Trp | Arg | Pro | Gly  | Glu | Ser | Val  | Trp     | Thr | Thr | His | His | Phe | Asp | Gln | Lys |
|     | 210 |     |      |     |     | 215  | _       |     |     |     | 220 |     | _   |     | _   |
| Arg | Tyr | Gly | Glu  | Val | Ile | Asn  | Arg     | Cys | Ile | Phe | Ser | Asn | Gly | Met | Phe |
| 225 |     |     |      |     | 230 |      |         |     |     | 235 |     |     |     |     | 240 |
| Tyr | Cys | Leu | Ser  | Thr | Ser | Gly  | Arg     | Leu | Ser | Phe | Phe | Asp | Pro | Ser | Arg |
|     |     |     |      | 245 |     |      |         |     | 250 |     |     |     |     | 255 |     |
| Glu | Thr | Trp | Asn  | Val | Leu | Pro  | Val     | Lys | Pro | Cys | Arg | Ala | Phe | Arg | Arg |
|     |     |     | 260  |     |     |      |         | 265 |     |     |     |     | 270 |     |     |
| Lys | Ile | Met | Leu  | Val | Arg | Gln  | Val     | Phe | Met | Thr | Glu | His | Glu | Gly | Asp |
|     |     | 275 |      |     |     |      | 280     |     |     |     |     | 285 |     |     |     |
| Ile | Phe | Val | Val  | Thr | Thr | Arg  | Arg     | Val | Asn | Asn | Arg | Lys | Leu | Leu | Ala |
|     | 290 |     |      |     |     | 295  |         |     |     |     | 300 |     |     |     |     |
| Phe | Lys | Leu | Asn  | Leu | Gln | Gly  | Asn     | Val | Trp | Glu | Glu | Met | Lys | Val | Pro |
| 305 |     |     |      |     | 310 |      |         |     |     | 315 |     | -   |     |     | 320 |
| Asn | Gly | Leu | Thr  | Val | Phe | Ser  | Ser     | Asp | Ala | Thr | Ser | Leu | Thr | Arg | Ala |
|     |     |     |      | 325 |     |      |         |     | 330 |     |     |     |     | 335 |     |
| Gly | Leu | Pro | Glu  | Glu | Glu | Arg  | Asn     | Ile | Leu | Tyr | Ser | Ser | Asp | Ile | Asp |
|     |     |     | 340  |     |     |      |         | 345 |     |     |     |     | 350 |     |     |
| Asp | Phe | Val | Lys  | Ser | Ser | His  | Pro     | Thr | Phe | Tyr | Tyr | Tyr | Asp | Cys | Ser |
|     |     | 355 |      |     |     |      | 360     |     |     |     |     | 365 | _   | _   |     |
| Ala | Trp | Leu | Gln  | Pro | Pro | His  | Asp     | Asn | Phe | Asn | Phe |     |     |     |     |
|     | 370 |     |      |     |     | 375  | _       |     |     |     | 380 |     |     |     |     |
| (2) | THE |     | T 11 |     | CEO | TD 1 | 70 - 00 |     |     |     |     |     |     |     |     |

- (2) INFORMATION FOR SEQ ID NO:99:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 667 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..667
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481635
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

mtgacgcttg gysttcttgc accctaccgt gggattggca ttggtaagtc ataaatctgc 60 tgtgccaaac ttgaataccg acaaaacatg aataatgaag aaaactgtta gcatgttgtg 120 taattctgtt gttttcctta cgttttaaca catgaggcca gctgtagtat gtttattctg 180 tagttctcta tttgaagtgt ctccatttag agattcaaac caccaagaaa tagtccttag 240 ggttttatgc atatcgttgt tttaccgaga aactggaatt agtgactatg atttcctcct 300 atatcaagat ttaagatcga attccctgct tttagaaaga aaaactcgat gtctataatt 360 tgtgtatctt gtttttttcg tcttttgcag gctcaaatct attgaatcat gttcttgaca 420 tgtgctccaa gcaaaacatg tgtgagatat acttgcatgt gcagacaaac aacgaagacg 480 caatcaagtt ctacaagaag ttcggctttg agatcacaga taccatacaa aactattaca 540 tcaacattga gccaagagat tgctacgttg tcagcaagtc ctttgctcaa tctgaagcca 600 acaaatgatg aaaaatacca aacttgggga agreatteet eeccagttte tttgttgcat 660 tcagttc

- (2) INFORMATION FOR SEQ ID NO:100:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 68 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..68
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481636
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

Met Arg Pro Ala Val Val Cys Leu Phe Cys Ser Ser Leu Phe Glu Val 1 5 10 15

Ser Pro Phe Arg Asp Ser Asn His Glu Glu Ile Val Leu Arg Val Leu 20 25 30

Cys Ile Ser Leu Phe Tyr Arg Glu Thr Gly Ile Ser Asp Tyr Asp Phe 35 40 45

Leu Leu Tyr Gln Asp Leu Arg Ser Asn Ser Leu Leu Leu Glu Arg Lys 50 55 60

Thr Arg Cys Leu

65

- (2) INFORMATION FOR SEQ ID NO:101:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 86 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..86
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481637
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

Met Phe Leu Thr Cys Ala Pro Ser Lys Thr Cys Val Arg Tyr Thr Cys

1 10 15

Met Cys Arg Gln Thr Thr Lys Thr Gln Ser Ser Ser Thr Arg Ser Ser

20 25 30

Ala Leu Arg Ser Gln Ile Pro Tyr Lys Thr Ile Thr Ser Thr Leu Ser
35 40 45

Gln Glu Ile Ala Thr Leu Ser Ala Ser Pro Leu Leu Asn Leu Lys Pro 50 55 60

Thr Asn Asp Glu Lys Tyr Gln Thr Trp Gly Ser His Ser Ser Pro Val 65 70 75 80

Ser Leu Leu His Ser Val

85

- (2) INFORMATION FOR SEQ ID NO:102:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 70 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..70
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481638
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

Met Cys Arg Gln Thr Thr Lys Thr Gln Ser Ser Ser Thr Arg Ser Ser

1 5 10 15 Ala Leu Arg Ser Gln Ile Pro Tyr Lys Thr Ile Thr Ser Thr Leu Ser

0 25 30

Gln Glu Ile Ala Thr Leu Ser Ala Ser Pro Leu Leu Asn Leu Lys Pro

35 40 45
Thr Asn Asp Glu Lys Tyr Gln Thr Trp Gly Ser His Ser Ser Pro Val

Ser Leu Leu His Ser Val

65 70

- (2) INFORMATION FOR SEQ ID NO:103:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1177 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1177
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481639
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

ctttgcgatg gtaaaatagt gttctcagat tgggctagca atgtgagttc tattctttgg 60 gtccctgttc gtgccttgag tgagaagctt gctagagggt catcatcagt cactccgctg 120 aaacaagata ttttagaggg aatgagaact gtagctttga aacttgaatt tggggttcat 180 cataaccaga tatttgagag aaccatagct gcacatttta ccgatccctt tgatgtgacc 240 acaagggtgg caaacaaatg caatgatggc actttggtct tgcaggttat gttacactcc 300 ctcgtcaagg cgaacttgat agttcttgat gtttggcttg atcttcaaga tggatttatt 360 catggacaaa atgatggaag accgacttca acgttctttc cgcttgtcgt gtctccaqqa 420 tctagagcag cagtcgtgtt cagtatatgc ctagacaaga gtatgtcatc agaagggaaa 480 gatttgcagc taccagaaag cattctgaat atcaaatatg gaatccatgg ggatagagca 540 gctggagcac acaggccagt ggatgcagat cactctgaaa ctgatactta aqqqaqaqat 600 ttggtgttca agagtgctat tgttttgcag cgtccagtac ttgatccttg cctcacagtt 660 ggattcctcc cacttccttc tgatgggctt agggtcggga aacttatcac catgcagtgg 720 agagtggaaa ggcttaaaga tctcaaagaa agtgaagccg tggaacaaca acatgatqaq 780 gtgttatatg aagtcaatgc aaattcggag aattggatga tcqctqqtag gaaqaqaqqc 840 catgtctctc tctcagagga gcaaggttca agagtagtaa tctcgatact atgtgtcccg 900 ttagttgcgg gttatgtccg tcctcctcaa ctcgggttgc caaacgtaga agaagcaaat 960 gtaagcagca atccatcggg tcctcactta gtatgtgtct tgcctccact tctcagttct 1020 tcctactgcg tacctgtcaa gtaatagaat ctcactctat attttttcca agaaaacatt 1080 ttttctgtat ttttattttg tttgcgatca aagaaatatc agagtatggg atcatcaatg atgagagtga tttttctttt gtgacgattt tatttcc

- (2) INFORMATION FOR SEQ ID NO:104:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 196 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..196
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481640
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

Leu Cys Asp Gly Lys Ile Val Phe Ser Asp Trp Ala Ser Asn Val Ser

1 10 15

Ser Ile Leu Trp Val Pro Val Arg Ala Leu Ser Glu Lys Leu Ala Arg 20 25 30

Gly Ser Ser Ser Val Thr Pro Leu Lys Gln Asp Ile Leu Glu Gly Met 35 40 45

Arg Thr Val Ala Leu Lys Leu Glu Phe Gly Val His His Asn Gln Ile 50 60

Phe Glu Arg Thr Ile Ala Ala His Phe Thr Asp Pro Phe Asp Val Thr 65 70 75 80

Thr Arg Val Ala Asn Lys Cys Asn Asp Gly Thr Leu Val Leu Gln Val
85 90 95

Met Leu His Ser Leu Val Lys Ala Asn Leu Ile Val Leu Asp Val Trp
100 105 110

Leu Asp Leu Gln Asp Gly Phe Ile His Gly Gln Asn Asp Gly Arg Pro 120 Thr Ser Thr Phe Phe Pro Leu Val Val Ser Pro Gly Ser Arg Ala Ala 135 Val Val Phe Ser Ile Cys Leu Asp Lys Ser Met Ser Ser Glu Gly Lys 150 155 Asp Leu Gln Leu Pro Glu Ser Ile Leu Asn Ile Lys Tyr Gly Ile His 165 170 Gly Asp Arg Ala Ala Gly Ala His Arg Pro Val Asp Ala Asp His Ser 180 185 Glu Thr Asp Thr 195 (2) INFORMATION FOR SEQ ID NO:105: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 149 amino acids

- - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..149
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481641
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

Met Arg Thr Val Ala Leu Lys Leu Glu Phe Gly Val His His Asn Gln 10

Ile Phe Glu Arg Thr Ile Ala Ala His Phe Thr Asp Pro Phe Asp Val 25

Thr Thr Arg Val Ala Asn Lys Cys Asn Asp Gly Thr Leu Val Leu Gln 40

Val Met Leu His Ser Leu Val Lys Ala Asn Leu Ile Val Leu Asp Val 55

Trp Leu Asp Leu Gln Asp Gly Phe Ile His Gly Gln Asn Asp Gly Arg 70 75

Pro Thr Ser Thr Phe Phe Pro Leu Val Val Ser Pro Gly Ser Arg Ala 85 90

Ala Val Val Phe Ser Ile Cys Leu Asp Lys Ser Met Ser Ser Glu Gly 105

Lys Asp Leu Gln Leu Pro Glu Ser Ile Leu Asn Ile Lys Tyr Gly Ile 120 125

His Gly Asp Arg Ala Ala Gly Ala His Arg Pro Val Asp Ala Asp His 135 140

Ser Glu Thr Asp Thr

- (2) INFORMATION FOR SEQ ID NO:106:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 110 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..110
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481642
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:106: Met Gln Trp Arg Val Glu Arg Leu Lys Asp Leu Lys Glu Ser Glu Ala

10 Val Glu Gln Gln His Asp Glu Val Leu Tyr Glu Val Asn Ala Asn Ser

110

105

- (2) INFORMATION FOR SEQ ID NO:107:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1337 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1337
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481647
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:107: aaaaaaataa aaataaaaaa tottoacgtt tottototot ototototo cgaqooacca 60 aatctgaatt agggtttttt gagaatattc atcttttgat ttcaaattct tcacccactg 120 tgtaatttca ctcgtcagga ttcatcagag gaatcatgat tacagattcg atcaccaacg 180 cttctgctac ttcagctccg agagattccg gaaagaagaa gaggaacaat aagtcggcta 240 agatgaagca gaacaagctt ggtctccgtc gtgagcaatg gctttctcaa gttgcggtga 300 360 qcaataagga agttaaagag gagaggagtg ttaatcgtag tcaaaagcct gatcatgaga 420 qttcagataa ggtgcgtaga gaagaggata acaatggtgg gaataatctt cttcatcatg agagttttat ggagtcacct tcaaatagct ctgttggtgg tacatattcg agcactaact 480 tcagtgggag aagtagcagg agtagtagta gcagcagtgg cttttgctct ggtaatataa 540 caqaaqaqqa aaatqtagac gatgatgatg atgggtgtgt ggatgattgg gaagctgttg 600 ctgatgcgtt agcggctgag gaagagattg agaaaaagag tcgtcctctt gagtctgtga 660 aagagcaagt gagtgttgga caatcagctt ctaatgtgtg tgatbcgtcg attagtgatg 720 780 catcaqatqt tqtqqqtgtt qaagatccaa agcaggaatg cttgagagtg tcatcaagga agcagactag taatagagct tggaggctag atgatgacct tcgcccacag gggttaccta 840 atttggcgaa gcagcttagt tttccggagt tagacaagcg ttttagctct gtggcgattc 900 960 cgtcttcatg tcccatatgc tacgaagact tggacttgac ggattcgaat ttcctcccct qtccttqtqq atttcgqctc tqtctqttct qccacaagac catttqcgat ggagatgggc 1020 gttgtccagg ctgcaggaaa ccctatgaac ggaatatggt caaggctgag actagtattc 1080 aaggtggtgg tctaacaatt cggttggctc gttcgtctag catgttttgc aagttttaaa 1140 aggagaggtg cggttttctc aaccatgttg tcttttggaa ctcgagaact tgagctctgt 1200 tttctatgtc atctatggtt ctaagtctga aacactgtgg tgatgatgta gaatgtgatg 1260 tgtgaataca taaaaggtgg tacagaaaat gattcaaata catttagata gtttcaataa 1320 tgaatgctat gttctcc
- (2) INFORMATION FOR SEQ ID NO:108:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 327 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..327
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481648
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

Met Ile Thr Asp Ser Ile Thr Asn Ala Ser Ala Thr Ser Ala Pro Arg

| 1          |           |            |            | 5         |            |           |            |            | 10        |            |           |            |            | 15         |            |
|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|-----------|------------|-----------|------------|------------|------------|------------|
| _          | Ser       | Gly        | Lys<br>20  | _         | Lys        | Arg       | Asn        | Asn<br>25  |           | Ser        | Ala       | Lys        |            | Lys        | Gln        |
| Asn        | Lys       | Leu<br>35  |            | Leu       | Arg        | Arg       | Glu<br>40  |            | Trp       | Leu        | Ser       | Gln<br>45  | 30<br>Val  | Ala        | Val        |
| Ser        | Asn<br>50 |            | Glu        | Val       | Lys        | Glu<br>55 |            | Arg        | Ser       | Val        | Asn<br>60 |            | Ser        | Gln        | Lys        |
| Pro<br>65  | Asp       | His        | Glu        | Ser       | Ser<br>70  |           | Lys        | Val        | Arg       | Arg<br>75  |           | Glu        | Asp        | Asn        | Asn<br>80  |
| Gly        | Gly       | Asn        | Asn        | Leu<br>85 | Leu        | His       | His        | Glu        | Ser<br>90 | Phe        | Met       | Glu        | Ser        | Pro<br>95  | Ser        |
| Asn        | Ser       | Ser        | Val<br>100 | Gly       | Gly        | Thr       | Tyr        | Ser<br>105 | Ser       | Thr        | Asn       | Phe        | Ser<br>110 | Gly        | Arg        |
| Ser        | Ser       | Arg<br>115 | Ser        | Ser       | Ser        | Ser       | Ser<br>120 | Ser        | Gly       | Phe        | Cys       | Ser<br>125 | Gly        | Asn        | Ile        |
|            | 130       |            |            |           |            | 135       |            |            |           |            | 140       |            |            | Asp        | _          |
| 145        |           |            |            |           | 150        |           |            |            |           | 155        |           |            |            | Glu        | 160        |
|            |           |            |            | 165       |            |           |            |            | 170       |            |           |            |            | Gly<br>175 |            |
|            |           |            | 180        |           |            |           |            | 185        |           |            | _         |            | 190        | Asp        |            |
|            |           | 195        |            |           |            |           | 200        |            |           |            |           | 205        |            | Ser        |            |
|            | 210       |            |            |           |            | 215       |            |            |           |            | 220       |            |            | Arg        |            |
| 225        |           |            |            |           | 230        |           |            |            |           | 235        |           |            |            | Leu        | 240        |
|            |           |            |            | 245       |            |           |            |            | 250       |            |           |            |            | Cys<br>255 | _          |
|            |           |            | 260        |           |            |           |            | 265        |           |            |           | _          | 270        | Cys        |            |
|            |           | 275        |            |           |            |           | 280        |            |           |            |           | 285        |            | Asp        | _          |
|            | 290       |            |            |           |            | 295       |            |            |           |            | 300       |            |            | Lys        |            |
| Glu<br>305 | Thr       | Ser        | Ile        | Gln       | Gly<br>310 | Gly       | Gly        | Leu        | Thr       | Ile<br>315 | Arg       | Leu        | Ala        | Arg        | Ser<br>320 |
| Ser        | Ser       | Met        | Phe        | Cys       | Lys        | Phe       |            |            |           |            |           |            |            |            |            |

- 325
  (2) INFORMATION FOR SEQ ID NO:109:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 298 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..298
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481649
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:
- Met Lys Gln Asn Lys Leu Gly Leu Arg Arg Glu Gln Trp Leu Ser Gln

  10
  15
  Val Ala Val Ser Asn Lys Glu Val Lys Clu Clu Arg Sor Val Asn Arg
- Val Ala Val Ser Asn Lys Glu Val Lys Glu Glu Arg Ser Val Asn Arg 20 25 30
- Ser Gln Lys Pro Asp His Glu Ser Ser Asp Lys Val Arg Arg Glu Glu 35 40 45

Asp Asn Asn Gly Gly Asn Asn Leu Leu His His Glu Ser Phe Met Glu Ser Pro Ser Asn Ser Ser Val Gly Gly Thr Tyr Ser Ser Thr Asn Phe 75 Ser Gly Arg Ser Ser Arg Ser Ser Ser Ser Ser Gly Phe Cys Ser 90 Gly Asn Ile Thr Glu Glu Glu Asn Val Asp Asp Asp Asp Gly Cys 105 Val Asp Asp Trp Glu Ala Val Ala Asp Ala Leu Ala Ala Glu Glu Glu 115 120 125 Ile Glu Lys Lys Ser Arg Pro Leu Glu Ser Val Lys Glu Gln Val Ser 140 135 Val Gly Gln Ser Ala Ser Asn Val Cys Asp Xaa Ser Ile Ser Asp Ala 150 155 Ser Asp Val Val Gly Val Glu Asp Pro Lys Gln Glu Cys Leu Arg Val 165 170 Ser Ser Arg Lys Gln Thr Ser Asn Arg Ala Trp Arg Leu Asp Asp Asp 180 185 Leu Arg Pro Gln Gly Leu Pro Asn Leu Ala Lys Gln Leu Ser Phe Pro 200 Glu Leu Asp Lys Arg Phe Ser Ser Val Ala Ile Pro Ser Ser Cys Pro 215 Ile Cys Tyr Glu Asp Leu Asp Leu Thr Asp Ser Asn Phe Leu Pro Cys 230 235 Pro Cys Gly Phe Arg Leu Cys Leu Phe Cys His Lys Thr Ile Cys Asp 250 Gly Asp Gly Arg Cys Pro Gly Cys Arg Lys Pro Tyr Glu Arg Asn Met 265 Val Lys Ala Glu Thr Ser Ile Gln Gly Gly Leu Thr Ile Arg Leu 280 Ala Arg Ser Ser Ser Met Phe Cys Lys Phe 295

- (2) INFORMATION FOR SEQ ID NO:110:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 236 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..236
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481650
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:110: Met Glu Ser Pro Ser Asn Ser Ser Val Gly Gly Thr Tyr Ser Ser Thr 10 Asn Phe Ser Gly Arg Ser Ser Arg Ser Ser Ser Ser Ser Gly Phe 25 Cys Ser Gly Asn Ile Thr Glu Glu Glu Asn Val Asp Asp Asp Asp 40 Gly Cys Val Asp Asp Trp Glu Ala Val Ala Asp Ala Leu Ala Ala Glu 55 Glu Glu Ile Glu Lys Lys Ser Arg Pro Leu Glu Ser Val Lys Glu Gln 7Ω 7.5 Val Ser Val Gly Gln Ser Ala Ser Asn Val Cys Asp Xaa Ser Ile Ser 85 90 Asp Ala Ser Asp Val Val Gly Val Glu Asp Pro Lys Gln Glu Cys Leu 105

Arg Val Ser Ser Arg Lys Gln Thr Ser Asn Arg Ala Trp Arg Leu Asp

|            |            | 115        |            |            |            |            | 120        |            |            |            |            | 125        |            |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Asp        | Asp<br>130 | Leu        | Arg        | Pro        | Gln        | Gly<br>135 | Leu        | Pro        | Asn        | Leu        | Ala<br>140 | Lys        | Gln        | Leu        | Ser        |
| Phe<br>145 | Pro        | Glu        | Leu        | Asp        | Lys<br>150 | Arg        | Phe        | Ser        | Ser        | Val<br>155 | Ala        | Ile        | Pro        | Ser        | Ser<br>160 |
| Cys        | Pro        | Ile        | Cys        | Tyr<br>165 | Glu        | Asp        | Leu        | Asp        | Leu<br>170 | Thr        | Asp        | Ser        | Asn        | Phe<br>175 | Leu        |
| Pro        | Cys        | Pro        | Cys<br>180 | Gly        | Phe        | Arg        | Leu        | Cys<br>185 | Leu        | Phe        | Cys        |            | Lys<br>190 | Thr        | Ile        |
| Cys        | Asp        | Gly<br>195 | Asp        | Gly        | Arg        | Cys        | Pro<br>200 | Gly        | Cys        | Arg        | Lys        | Pro<br>205 | Tyr        | Glu        | Arg        |
| Asn        | Met<br>210 | Val        | Lys        | Ala        | Glu        | Thr<br>215 | Ser        | Ile        | Gln        | Gly        | Gly<br>220 | Gly        | Leu        | Thr        | Ile        |
| Arg<br>225 | Leu        | Ala        | Arg        | Ser        | Ser<br>230 | Ser        | Met        | Phe        | Cys        | Lys<br>235 | Phe        |            |            |            |            |
| (2)        | INFO       | ORMAC      | rion       | FOR        | SEQ        | ID 1       | 10:13      | l1:        |            |            |            |            |            |            |            |
|            | (i)        | ) SEÇ      | QUENC      | CE CE      | IARAC      | CTER       | ISTIC      | CS:        |            |            |            |            |            |            |            |
|            |            | ( 2        | A) LE      | ENGTE      | H: 12      | 298 ł      | oase       | pair       | :s         |            |            |            |            |            |            |
|            |            | ( I        | 3) TY      | PE:        | nucl       | leic       | acio       | i          |            |            |            |            |            |            |            |
|            |            | ((         | C) Si      | rani       | DEDNE      | ESS:       | sing       | gle        |            |            |            |            |            |            |            |
|            |            | ( I        | ) T(       | OPOLO      | OGY:       | line       | ear        |            |            |            |            |            |            |            |            |

- (D) TOPOLOGY: IInear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1298
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481668
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:111: amatectmat egaaaaaegg aaattagttt acaggetgta atttttettt caggetetet 60 ctctttcgtc gccgaaccag ttccagaaag gctgtagcga ttcaaaattt cacaaattaa 120 agtettette etetesgaat cagagattgt eteettetta geteagatet gggagettet 180 240 tgtgatagat ttggaagaag atgactgtga tcgatattct gactagagtt gactcgatct gtaagaagta cgacaagtac gatgtcgaca agcagcggga ggccaatatc tccggcgatg 300 atgcctttgc tcgtctctat ggagctttcg aaacccaaat cgagaccgct ctcgagaaag 360 ctgaacttgt tacgaaggag aaaaacaggg ctgctgctgt tgcaatgaat gctgagatcc 420 gccggaccaa ggcacgattg tcaqaqqaaq ttcccaaqtt qcaaaqactt qctqtcaaqc 480 gggttaaggg ccttacaacc qaaqaqcttq ctqcqaqaaa tqatttqqtq ctcqctcttc 540 600 cagccaggat tgaagccata cctgatggga cagcaggtgg ccctaaaagc actagtgctt ggactccctc ctcaacaaca tctcgtcctg atatcaaatt tgattcagat gggcgttttg 660 acgatgatta ctttcaagaa tcaaatgaat ctagccaatt caggcaggag tatgagatgc 720 ggaaaataaa acaggaacaa ggtcttgaca tgatctccga agggttagat gctttgaaga 780 acatggcttc tgatatgaac gaggaactgg atagacaagt tccactgatg gatgaaatcg 840 acacaaaggt ggacagagca acctccgatc ttaagaacac caatgttaga cttaaagata 900 ccgtgaacca gctgagatct agccggaact tctgtatcga tattgttttg ttgtgtattg 960 ttctgggtat cgctgcatac ttatacaatg tactgaagta atgagatgaa ccctacgaaa 1020 ggacccatta gtacttatca cccgagtcaa tatccagtgt gtgcttgtgt cttactcttc 1080 ttctctgata tttctacgag agtttcttct taatgtcaag aatattcaag tcttatcttc 1140 ctgcatcgac ttttctccat gttgttcgtq tqcataqatt tcatctqtca aaatqtqcqt 1200 caaactaatt gattgctgtg tctgcggcag tgtgctatta ttttccaqcc aaaatatgat 1260 tttttattta ttttaaaatc aagccaaatt ttaattcc
- (2) INFORMATION FOR SEQ ID NO:112:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 266 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..266

(D) OTHER INFORMATION: / Ceres Seq. ID 1481669 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:112: Met Thr Val Ile Asp Ile Leu Thr Arg Val Asp Ser Ile Cys Lys Lys 10 Tyr Asp Lys Tyr Asp Val Asp Lys Gln Arg Glu Ala Asn Ile Ser Gly 25 Asp Asp Ala Phe Ala Arg Leu Tyr Gly Ala Phe Glu Thr Gln Ile Glu 40 Thr Ala Leu Glu Lys Ala Glu Leu Val Thr Lys Glu Lys Asn Arg Ala 55 Ala Ala Val Ala Met Asn Ala Glu Ile Arg Arg Thr Lys Ala Arg Leu Ser Glu Glu Val Pro Lys Leu Gln Arg Leu Ala Val Lys Arg Val Lys 90 Gly Leu Thr Thr Glu Glu Leu Ala Ala Arg Asn Asp Leu Val Leu Ala 105 Leu Pro Ala Arg Ile Glu Ala Ile Pro Asp Gly Thr Ala Gly Gly Pro 120 Lys Ser Thr Ser Ala Trp Thr Pro Ser Ser Thr Thr Ser Arg Pro Asp 135 140 Ile Lys Phe Asp Ser Asp Gly Arg Phe Asp Asp Asp Tyr Phe Gln Glu 150 155 Ser Asn Glu Ser Ser Gln Phe Arg Gln Glu Tyr Glu Met Arg Lys Ile 165 170 Lys Gln Glu Gln Gly Leu Asp Met Ile Ser Glu Gly Leu Asp Ala Leu 185 Lys Asn Met Ala Ser Asp Met Asn Glu Glu Leu Asp Arg Gln Val Pro 200 Leu Met Asp Glu Ile Asp Thr Lys Val Asp Arg Ala Thr Ser Asp Leu 215 Lys Asn Thr Asn Val Arg Leu Lys Asp Thr Val Asn Gln Leu Arg Ser 230 235 Ser Arg Asn Phe Cys Ile Asp Ile Val Leu Cys Ile Val Leu Gly 245 250 Ile Ala Ala Tyr Leu Tyr Asn Val Leu Lys 260

- (2) INFORMATION FOR SEQ ID NO:113:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 198 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..198
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481670
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:
- Met Asn Ala Glu Ile Arg Arg Thr Lys Ala Arg Leu Ser Glu Glu Val 1 5 10 15 Pro Lys Leu Gln Arg Leu Ala Val Lys Arg Val Lys Gly Leu Thr Thr
- 20 25 30 Glu Glu Leu Ala Ala Arg Asn Asp Leu Val Leu Ala Leu Pro Ala Arg
- 35 40 45
  Ile Glu Ala Ile Pro Asp Gly Thr Ala Gly Gly Pro Lys Ser Thr Ser
- 11e Glu Ala 11e Pro Asp Gly Thr Ala Gly Gly Pro Lys Ser Thr Ser 50 55 60
- Ala Trp Thr Pro Ser Ser Thr Thr Ser Arg Pro Asp Ile Lys Phe Asp 65 70 75 80
- Ser Asp Gly Arg Phe Asp Asp Asp Tyr Phe Gln Glu Ser Asn Glu Ser

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90
Ser Gln Phe Arg Gln Glu Tyr Glu Met Arg Lys Ile Lys Gln Glu Gln
                                105
Gly Leu Asp Met Ile Ser Glu Gly Leu Asp Ala Leu Lys Asn Met Ala
                            120
Ser Asp Met Asn Glu Glu Leu Asp Arg Gln Val Pro Leu Met Asp Glu
                        135
                                            140
Ile Asp Thr Lys Val Asp Arg Ala Thr Ser Asp Leu Lys Asn Thr Asn
                    150
                                        155
Val Arg Leu Lys Asp Thr Val Asn Gln Leu Arg Ser Ser Arg Asn Phe
                165
                                    170
Cys Ile Asp Ile Val Leu Cys Ile Val Leu Gly Ile Ala Ala Tyr
                                185
Leu Tyr Asn Val Leu Lys
        195
(2) INFORMATION FOR SEQ ID NO:114:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 770 base pairs
          (B) TYPE: nucleic acid
          (C) STRANDEDNESS: single
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: DNA (genomic)
    (ix) FEATURE:
          (A) NAME/KEY: -
          (B) LOCATION: 1..770
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481681
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:
cytttcgacc tctcctactt actactactc agctgcttct gccttctagg gttctttctc
cgttcaccct ccgccgcacg agttgtccag ctccgccgca ttcttctgtc tcccagatca
```

120 ccggctttta gcaaatccgg ctgcttttca ctctaattcg taaaccactt gtgggatttg 180 agcatctttt acattctcca aaatctctgc tttctagggt tttgtgagtt ttggtgggat 240 gagtagtgtg ttcagtgatc agatcctgat tgataagctc gctaagctca atagcagtca 300 acagtctatc gaaactctgt cacattggtg tatattcaat cggagcaaag cagaattgat 360 cgttacgaca tgggagaaac agtttcacag tacagagatg gatcagaaag tccctcttt 420 gtatttggct aatgatattc ttcagaacag taagcgtcaa ggtaatgagt ttgtgcaaga 480 gttctggaat gttcttccta aggctcttaa agacattgtt tctcaaggag atgataatgg 540 caaaagcgct gtcgcacgtg tgatcaagat atgggaagaa agaagagtgt ttggatcacg 600 ttcaaagagt cttaaagatg taatgcttgg agaagatgtt cctctgccac ttgatatcag 660 caaaaagcgg gsctcgcgga tccaaatctt caaaacggga gtcaaaatcg tccagaacga aattaacatc aagtggtggt gtgctgarar gtagcatcag catatcattt (2) INFORMATION FOR SEQ ID NO:115:

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- (2) INFORMATION FOR SEQ ID NO:115:
  - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 171 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..171
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481682
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

Met Ser Ser Val Phe Ser Asp Gln Ile Leu Ile Asp Lys Leu Ala Lys 1 5 10 15

Leu Asn Ser Ser Gln Gln Ser Ile Glu Thr Leu Ser His Trp Cys Ile
20 25 30

Phe Asn Arg Ser Lys Ala Glu Leu Ile Val Thr Trp Glu Lys Gln
35 40 45

Phe His Ser Thr Glu Met Asp Gln Lys Val Pro Leu Leu Tyr Leu Ala

|           |            |            |            |              |           |            |            | _          |            |           |            |            |            |           |           |
|-----------|------------|------------|------------|--------------|-----------|------------|------------|------------|------------|-----------|------------|------------|------------|-----------|-----------|
|           | 50         |            |            |              |           | 55         |            |            |            |           | 60         |            |            |           |           |
| Asn<br>65 |            | Ile        | Leu        | Gln          | Asn<br>70 |            | Lys        | Arg        | Gln        | Gly<br>75 |            | Glu        | Phe        | Val       | Gln<br>80 |
|           | Phe        | Trp        | Asn        | Val<br>85    |           | Pro        | Lys        | Ala        | Leu<br>90  |           | Asp        | Ile        | Val        | Ser<br>95 |           |
| Gly       | Asp        | Asp        | Asn<br>100 | Gly          | Lys       | Ser        | Ala        | Val<br>105 |            | Arg       | Val        | Ile        | Lys<br>110 |           | Trp       |
| Glu       | Glu        | Arg<br>115 |            | Val          | Phe       | Gly        | Ser<br>120 |            | Ser        | Lys       | Ser        | Leu<br>125 |            | Asp       | Val       |
| Met       | Leu<br>130 |            | Glu        | Asp          | Val       | Pro<br>135 |            | Pro        | Leu        | Asp       | Ile<br>140 |            | Lys        | Lys       | Arg       |
| Xaa       | Ser        | Arg        | Ile        | Gln          | Ile       | Phe        | Lys        | Thr        | Gly        | Val       |            | Ile        | Val        | Gln       | Asn       |
| 145       |            |            |            |              | 150       |            | -          |            | -          | 155       | -          |            |            |           | 160       |
| Glu       | Ile        | Asn        | Ile        | Lys<br>165   | Trp       | Trp        | Cys        | Ala        | Xaa<br>170 |           |            |            |            |           |           |
| (2)       | INFO       | ORMAT      | rion       | FOR          | SEQ       | ID N       | NO:11      | 16:        |            |           |            |            |            |           |           |
|           |            |            |            | CE CE        |           |            |            |            |            |           |            |            |            |           |           |
|           |            | ( <i>I</i> | A) LI      | ENGTE        | H: 11     | l8 ar      | nino       | acio       | ds         |           |            |            |            |           |           |
|           |            | ( E        | 3) T       | YPE:         | amir      | no ac      | cid        |            |            |           |            |            |            |           |           |
|           |            | ((         | C) S:      | <b>TRANI</b> | DEDNE     | ESS:       |            |            |            |           |            |            |            |           |           |
|           |            | ( [        | ) T(       | OPOLO        | GY:       | line       | ear        |            |            |           |            |            |            |           |           |
|           | (ii)       | MOI        | LECUI      | LE TY        | PE:       | pept       | ide        |            |            |           |            |            |            |           |           |
|           | (ix)       | ) FE       | ATURI      | Ξ:           |           |            |            |            |            |           |            |            |            |           |           |
|           |            | ( <i>I</i> | A) NA      | AME/F        | EY:       | pept       | ide        |            |            |           |            |            |            |           |           |
|           |            | ( E        | 3) LO      | CAT          | ON:       | 1          | 118        |            |            |           |            |            |            |           |           |
|           |            |            |            | THER         |           |            |            |            |            |           |            | 148        | 31683      | 3         |           |
|           |            |            |            | CE DE        |           |            |            |            |            |           |            |            |            |           |           |
| 1         |            |            |            | Val<br>5     |           |            |            |            | 10         |           |            |            |            | 15        |           |
|           |            |            | 20         | Gln          |           |            |            | 25         |            |           |            |            | 30         |           |           |
|           |            | 35         |            | Leu          |           |            | 40         |            |            |           | _          | 45         | _          |           | _         |
|           | 50         |            |            | Ala          |           | 55         |            |            |            | _         | 60         |            | _          | -         |           |
| 65        |            |            |            | Ser          | 70        |            |            |            |            | 75        |            |            |            |           | 80        |
|           |            |            |            | Leu<br>85    | _         |            |            | _          | 90         | -         |            |            | -          | 95        |           |
|           |            |            | 100        | Gly          |           | Lys        | Ile        | Val<br>105 | Gln        | Asn       | Glu        | Ile        | Asn<br>110 | Ile       | Lys       |
| Trp       | Trp        | Cys<br>115 | Ala        | Xaa          | Xaa       |            |            |            |            |           |            |            |            |           |           |
| (2)       | INFO       | RMAI       | NOI        | FOR          | SEQ       | ID N       | 10:11      | 17:        |            |           |            |            |            |           |           |
|           | (i)        | SEÇ        | QUENC      | CE CF        | IARAC     | TER        | STIC       | cs:        |            |           |            |            |            |           |           |
|           |            |            |            | ENGTH        |           |            |            |            | s          |           |            |            |            |           |           |
|           |            |            |            | PE:          |           |            |            |            |            |           |            |            |            |           |           |
|           |            | •          | •          | rani         |           |            | -          | jle        |            |           |            |            |            |           |           |
|           |            |            |            | OPOLO        |           |            |            |            |            |           |            |            |            |           |           |
|           |            |            |            | E TY         | PE:       | DNA        | (ger       | omic       | :)         |           |            |            |            |           |           |
|           | (1X)       | FE.        |            |              |           |            |            |            |            |           |            |            |            |           |           |
|           |            |            |            | ME/F         |           |            | 001        |            |            |           |            |            |            |           |           |
|           |            | ( E        | з) Г(      | CAT          | ON:       | 11         | .004       |            |            |           |            |            |            |           |           |

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117: ctcgcatcgc atcgatcctc ccatctgcgc acccgcaagc ctattctccg cacctcctca ggtgaccggg aagatgatgc cgttgagcca aaccgacttc tcgccgtcgc agttcacctc ctcccagaat gccgccgccg actccaccac gccttccaag atgcgcggcg cgtccagcac

(D) OTHER INFORMATION: / Ceres Seq. ID 1481700

catgccgctc accgtgaagc aggtcgtcga cgcgcasagt ctggcacggg cgagaagggc

120 180

60

240

gctccgttca tcgtcaatgg cgtcgagatg gctaacattc gacttgtggg gatggtcaat 300 gccaaggtgg agcggacgac cgatgtgacc ttcacgctcg acgatggcac cggccgcctc 360 gatttcatca gatgggtgaa tgatgcttca gattcttttg aaactgctgc tattcagaat 420 ggtatgtaca ttgcggtcat tggaagcctc aagggactgc aagagaggaa gcgtgctact 480 gctttctcaa tcaggcctat aaccgatttc aatgaggtta cgctgcattt cattcagtgt 540 gttcggatgc atatagagaa cattgaatta aaggctggca gtcctgcacg aatcagttct 600 tctatgggag tgtcattctc aaatggattc agtgaatcaa gcacaccgac atctttgaaa 660 tocagtoccg caccggtgac cagcgggtca tocgatactg atotgcacac goaggtootg 720 aattttttta atgaaccagc gaacctcgag agtgagcatg gggtgcacgt tgatgaagta 780 ctcaagcggt tcaaactttt gccgaagaag cagatcacgg atgctattga ttacaatatg 840 gactcggggc gtctttactc aacaattgat gaattccact acaagqcaac ttaaccgatt 900 tgaaggccag cctgctggaa atggcagagg actaagtatc acttgtacta aaccaaagtc 960 tggaaatgtc atgttgtgtc atgaaatgca tggttggttt atgg

- (2) INFORMATION FOR SEQ ID NO:118:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 297 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..297
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481701
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:
- Leu Ala Ser His Arg Ser Ser His Leu Arg Thr Arg Lys Pro Ile Leu
  1 5 10 15
- Arg Thr Ser Ser Gly Asp Arg Glu Asp Asp Ala Val Glu Pro Asn Arg
  20 25 30
- Leu Leu Ala Val Ala Val His Leu Leu Pro Glu Cys Arg Arg Arg Leu 35 40 45
- His His Ala Phe Gln Asp Ala Arg Arg Val Gln His His Ala Ala His 50 55 60
  Arg Glu Ala Gly Arg Arg Arg Ala Xaa Ser Gly Thr Gly Glu Lys Gly
- 65 70 75 80
  Ala Pro Phe Ile Val Asn Gly Val Glu Met Ala Asn Ile Arg Leu Val
- 85 90 95
  Gly Met Val Asn Ala Lys Val Glu Arg Thr Thr Asp Val Thr Phe Thr
- 100 105 110 Leu Asp Asp Gly Thr Gly Arg Leu Asp Phe Ile Arg Trp Val Asn Asp
- 115 120 125
  Ala Ser Asp Ser Phe Glu Thr Ala Ala Ile Gln Asn Gly Met Tyr Ile
- 130 135 140
  Ala Val Ile Gly Ser Leu Lys Gly Leu Gln Glu Arg Lys Arg Ala Thr
- 145 150 155 160
  Ala Phe Ser Ile Arg Pro Ile Thr Asp Phe Asn Glu Val Thr Leu His
- 165 170 175
  Phe Ile Gln Cys Val Arg Met His Ile Glu Asn Ile Glu Leu Lys Ala
- 180 185 190
  Gly Ser Pro Ala Arg Ile Ser Ser Ser Met Gly Val Ser Phe Ser Asn
- 195 200 205
  Gly Phe Ser Glu Ser Ser Thr Pro Thr Ser Leu Lys Ser Ser Pro Ala
- 210 215 220

  Pro Val Thr Ser Gly Ser Ser Asp Thr Asp Leu His Thr Gln Val Leu
  225 230 235 240
- Asn Phe Phe Asn Glu Pro Ala Asn Leu Glu Ser Glu His Gly Val His 245 250 255
- Val Asp Glu Val Leu Lys Arg Phe Lys Leu Leu Pro Lys Lys Gln Ile 260 265 270

Thr Asp Ala Ile Asp Tyr Asn Met Asp Ser Gly Arg Leu Tyr Ser Thr
275 280 285

Ile Asp Glu Phe His Tyr Lys Ala Thr 290 295

- (2) INFORMATION FOR SEQ ID NO:119:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 208 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..208
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481702
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

Met Ala Asn Ile Arg Leu Val Gly Met Val Asn Ala Lys Val Glu Arg

1 10 15

Thr Thr Asp Val Thr Phe Thr Leu Asp Asp Gly Thr Gly Arg Leu Asp 20 25 30

Phe Ile Arg Trp Val Asn Asp Ala Ser Asp Ser Phe Glu Thr Ala Ala 35 40 45

Ile Gln Asn Gly Met Tyr Ile Ala Val Ile Gly Ser Leu Lys Gly Leu 50 55 60

Gln Glu Arg Lys Arg Ala Thr Ala Phe Ser Ile Arg Pro Ile Thr Asp 65 70 75 80

Phe Asn Glu Val Thr Leu His Phe Ile Gln Cys Val Arg Met His Ile 85 90 95

Glu Asn Ile Glu Leu Lys Ala Gly Ser Pro Ala Arg Ile Ser Ser Ser 100 105 110

Met Gly Val Ser Phe Ser Asn Gly Phe Ser Glu Ser Ser Thr Pro Thr

145 150 155 160 Glu Ser Glu His Gly Val His Val Asp Glu Val Leu Lys Arg Phe Lys

Ser Gly Arg Leu Tyr Ser Thr Ile Asp Glu Phe His Tyr Lys Ala Thr
195 200 205

- (2) INFORMATION FOR SEQ ID NO:120:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 200 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..200
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481703
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

Met Val Asn Ala Lys Val Glu Arg Thr Thr Asp Val Thr Phe Thr Leu

5 10 15

Asp Asp Gly Thr Gly Arg Leu Asp Phe Ile Arg Trp Val Asn Asp Ala

|            |            |            | 20         |            |            |            |            | 25         |            |            |            |            | 30         |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ser        | Asp        | Ser<br>35  | Phe        | Glu        | Thr        | Ala        | Ala<br>40  | Ile        | Gln        | Asn        | Gly        | Met<br>45  | Tyr        | Ile        | Ala        |
| Val        | Ile<br>50  | Gly        | Ser        | Leu        | Lys        | Gly<br>55  | Leu        | Gln        | Glu        | Arg        | Lys<br>60  | Arg        | Ala        | Thr        | Ala        |
| Phe<br>65  | Ser        | Ile        | Arg        | Pro        | Ile<br>70  | Thr        | Asp        | Phe        | Asn        | Glu<br>75  | Val        | Thr        | Leu        | His        | Phe<br>80  |
| Ile        | Gln        | Cys        | Val        | Arg<br>85  | Met        | His        | Ile        | Glu        | Asn<br>90  | Ile        | Glu        | Leu        | Lys        | Ala<br>95  | Gly        |
| Ser        | Pro        | Ala        | Arg<br>100 | Ile        | Ser        | Ser        | Ser        | Met<br>105 | Gly        | Val        | Ser        | Phe        | Ser<br>110 | Asn        | Gly        |
| Phe        | Ser        | Glu<br>115 | Ser        | Ser        | Thr        | Pro        | Thr<br>120 | Ser        | Leu        | Lys        | Ser        | Ser<br>125 | Pro        | Ala        | Pro        |
| Val        | Thr<br>130 | Ser        | Gly        | Ser        | Ser        | Asp<br>135 | Thr        | Asp        | Leu        | His        | Thr<br>140 | Gln        | Val        | Leu        | Asn        |
| Phe<br>145 | Phe        | Asn        | Glu        | Pro        | Ala<br>150 | Asn        | Leu        | Glu        | Ser        | Glu<br>155 | His        | Gly        | Val        | His        | Val<br>160 |
| Asp        | Glu        | Val        | Leu        | Lys<br>165 | Arg        | Phe        | Lys        | Leu        | Leu<br>170 | Pro        | Lys        | Lys        | Gln        | Ile<br>175 | Thr        |
| Asp        | Ala        | Ile        | Asp<br>180 | Tyr        | Asn        | Met        | Asp        | Ser<br>185 | Gly        | Arg        | Leu        | Tyr        | Ser<br>190 | Thr        | Ile        |
| Asp        | Glu        | Phe<br>195 | His        | Tyr        | Lys        | Ala        | Thr<br>200 |            |            |            |            |            |            |            |            |

- (2) INFORMATION FOR SEQ ID NO:121:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 500 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..500
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481704
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:121: atcattactc cactccacat tcgacaaaat atatcttaga caagttaagt ttaacgataa 60 tggattcaag atatgttacc ctatgcattt tcttagtact tgccttacat ggagatacta 120 ctttggcaga aacttgcagg cagtatgttg aagggcagcc attttgcttt aaagcaatgt 180 gcaaggcaaa ttgttttatg gagggaaaat tctctgatgg ttcttatgta aagggttaca 240 gatgtgaatc aggtggattc cactcggtgt gtgtttgcct tttgtgcaaa aattagttat 300 ctaaagacaa gcggatatat cttcttatgt tcctatccat tatttaggat tatagtccaa 360 ataattatac aatagcttag ttaaatagtt ttttatttat agacaaatgt agcactagtt 420 aactagttgt gattttttaa atttctcagc tataaatcag gaaatatttt ttaacacttc 480 aataatatat ctttgttcgc
- (2) INFORMATION FOR SEQ ID NO:122:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 49 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..49
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481705
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

Ser Leu Leu His Ser Thr Phe Asp Lys Ile Tyr Leu Arg Gln Val Lys l 5 10 15 Phe Asn Asp Asn Gly Phe Lys Ile Cys Tyr Pro Met His Phe Leu Ser

Thr Cys Leu Thr Trp Arg Tyr Tyr Phe Gly Arg Asn Leu Gln Ala Val35  $\phantom{0}$  40  $\phantom{0}$  45 Cys

- (2) INFORMATION FOR SEQ ID NO:123:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 97 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..97
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481706
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:
- His Tyr Ser Thr Pro His Ser Thr Lys Tyr Ile Leu Asp Lys Leu Ser

  1 10 15
- Leu Thr Ile Met Asp Ser Arg Tyr Val Thr Leu Cys Ile Phe Leu Val 20 25 30
- Leu Ala Leu His Gly Asp Thr Thr Leu Ala Glu Thr Cys Arg Gln Tyr 35 40 45
- Val Glu Gly Gln Pro Phe Cys Phe Lys Ala Met Cys Lys Ala Asn Cys
  50 60
- Phe Met Glu Gly Lys Phe Ser Asp Gly Ser Tyr Val Lys Gly Tyr Arg
  65 70 75 80
- Cys Glu Ser Gly Gly Phe His Ser Val Cys Val Cys Leu Leu Cys Lys
  85 90 95

Asn

- (2) INFORMATION FOR SEQ ID NO:124:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 78 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..78
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481707
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:
- Met Asp Ser Arg Tyr Val Thr Leu Cys Ile Phe Leu Val Leu Ala Leu 1 5 10 15
- His Gly Asp Thr Thr Leu Ala Glu Thr Cys Arg Gln Tyr Val Glu Gly 20 25 30
- Gln Pro Phe Cys Phe Lys Ala Met Cys Lys Ala Asn Cys Phe Met Glu  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Gly Lys Phe Ser Asp Gly Ser Tyr Val Lys Gly Tyr Arg Cys Glu Ser 50 55 60
- Gly Gly Phe His Ser Val Cys Val Cys Leu Leu Cys Lys Asn 65 70 75
- (2) INFORMATION FOR SEQ ID NO:125:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 916 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..916
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481716
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:125: aatttctgag caccaaacca accaagccaa tcttacqact qccttqcctt tqqcatqtct 60 ctaatttega cagettegat acteeteete caegeetgew eeetgetege egeegeaaga 120 gtccccgacc cggtagaaca tggcgacgtg aacacggcga tgcttaccaa cggctcgqcc 180 teggegaege egtegteece tgacageage ageaaeggea acttegagae gtacttetge 240 ttcctctgct cgggccgcga cccgctgctc attcaccact gccccatcta ctgggacgag 300 tgccacctca tctgcgacga tgacatgtcc accgccactc ctactccacc tgctgttgca 360 gtgtcgtcgt cgtcgtcgtc ccmgccccgt ccccatggtg caggtgcagg gcgatgatga 420 ctgctacgtc atgaagctct acatgtccgg ccgctacgtc atcgtcgaac accggccatg 480 caaatacatc gcctggtgct tcctcacntg cggcgscggg gagctggcgg cggccgaccg 540 gaaagccgtc acggccactg cgatccaggg gacctctctg cctgccgagc tatgcggcac 600 gcaggcggtc aatgctccac cattagcagg cgtcgtcgtc ccagcagcag cagcagcagc 660 tggtggtgct ggtgcgcacc gacggcgcta gctgcctagc tacttatccg cgaactaagg 720 gttaatttta gacataaaac ctgagaggag gattcaaggg attaaaatct ctttcttatt 780 ccaaagaaat tttagccact cgaatcctct ctgattttct ggctcctaaa ttagccctaa 840 tattaaagga ccaacagatg ccaaacttaa accatcgatc tctacaagat aactaatatt 900 ttgatttcca aacttt
- (2) INFORMATION FOR SEQ ID NO:126:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 120 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..120
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481717
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:
- Met Ser Leu Ile Ser Thr Ala Ser Ile Leu Leu His Ala Cys Xaa 1 5 10 15
- Leu Leu Ala Ala Arg Val Pro Asp Pro Val Glu His Gly Asp Val 20 25 30 Asn Thr Ala Met Leu Thr Asn Gly Ser Ala Ser Ala Thr Pro Ser Ser
- 35 40 45
  Pro Asp Ser Ser Ser Asn Gly Asn Phe Glu Thr Tyr Phe Cys Phe Leu
- 50 55 60

  Cys Ser Gly Arg Asp Pro Leu Leu Ile His His Cys Pro Ile Tyr Trp
- 65 70 75 80
  Asp Glu Cys His Leu Ile Cys Asp Asp Met Ser Thr Ala Thr Pro
- 85 90 95
- Thr Pro Pro Ala Val Ala Val Ser Ser Ser Ser Ser Ser Xaa Pro Arg
  100 105 110
- Pro His Gly Ala Gly Ala Gly Arg
- (2) INFORMATION FOR SEQ ID NO:127:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 123 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

(B) LOCATION: 1..123

(D) OTHER INFORMATION: / Ceres Seq. ID 1481718

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

Met Thr Cys Pro Pro Pro Leu Leu Leu His Leu Leu Leu Gln Cys Arg

10 15

Arg Arg Arg Pro Xaa Pro Val Pro Met Val Gln Val Gln Gly Asp
20 25 30

Asp Asp Cys Tyr Val Met Lys Leu Tyr Met Ser Gly Arg Tyr Val Ile 35 40 45

Val Glu His Arg Pro Cys Lys Tyr Ile Ala Trp Cys Phe Leu Xaa Cys 50 60

Gly Xaa Gly Glu Leu Ala Ala Ala Asp Arg Lys Ala Val Thr Ala Thr 65 70 75 80

Ala Ile Gln Gly Thr Ser Leu Pro Ala Glu Leu Cys Gly Thr Gln Ala 85 90 95

Val Asn Ala Pro Pro Leu Ala Gly Val Val Val Pro Ala Ala Ala Ala 100 105 110

Ala Ala Gly Gly Ala Gly Ala His Arg Arg 115 120

- (2) INFORMATION FOR SEQ ID NO:128:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 98 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..98
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481719
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

Met Val Gln Val Gln Gly Asp Asp Cys Tyr Val Met Lys Leu Tyr

1 5 10 15

Met Ser Gly Arg Tyr Val Ile Val Glu His Arg Pro Cys Lys Tyr Ile
20 25 30

Ala Trp Cys Phe Leu Xaa Cys Gly Xaa Gly Glu Leu Ala Ala Asp 35 40 45

Arg Lys Ala Val Thr Ala Thr Ala Ile Gln Gly Thr Ser Leu Pro Ala 50 55 60

Glu Leu Cys Gly Thr Gln Ala Val Asn Ala Pro Pro Leu Ala Gly Val 65 70 75 80

Val Val Pro Ala Ala Ala Ala Ala Gly Gly Ala Gly Ala His Arg 85 90 95

Arg Arg

- (2) INFORMATION FOR SEQ ID NO:129:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 553 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..553
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481728
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

aaatcgcggt cactgctccg aagtccgaac cttcatacac atcgtctcgt ttccgatttc cccaaattca ggccacaggc gctacaggac ccaggcacca ctcggtcggc ggccaccgcg

tegeceegee tgetegattg gggtegegtg tgegatagga agtattgtg tgtgtttgea aegtgatage ttgtactggg aacaaaggte aagatgggeg eettggacet acacettgae 240 tttgettetg etcaacatgg acaageeaag ttaaaggaat atgeeaagag etctetgttg 300 tetgatggaa actacaatae agacaagate aatggtteaa accetgatga etatgagaaa 360 tttgagaaag ggataatgea etatgggtgt eeacattata gaaggagatg eegeataaga 420 geteettget geaatgaaat ttttgattge egacaetgee acaatgaaac taagaattee 480 attaaaaattg ataaaatgaa gaggeatgaa etteeaegee atgaagtgea geaggttgta 540 tgeteattgt gtg

- (2) INFORMATION FOR SEQ ID NO:130:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 61 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..61
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481729
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

Lys Ser Arg Ser Leu Leu Arg Ser Pro Asn Leu His Thr His Arg Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Val Ser Asp Phe Pro Lys Phe Arg Pro Gln Ala Leu Gln Asp Pro Gly 20 25 30

Thr Thr Arg Ser Ala Ala Thr Ala Ser Pro Arg Leu Leu Asp Trp Gly 35 40 45

Arg Val Cys Asp Arg Lys Tyr Cys Val Val Phe Ala Thr 50 55 60

- (2) INFORMATION FOR SEQ ID NO:131:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 90 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..90
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481730
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

Asn Arg Gly His Cys Ser Glu Val Arg Thr Phe Ile His Ile Val Ser
1 10 15

Phe Pro Ile Ser Pro Asn Ser Gly His Arg Arg Tyr Arg Thr Gln Ala 20 25 30

Pro Leu Gly Arg Arg Pro Pro Arg Arg Pro Ala Cys Ser Ile Gly Val

Ala Cys Ala Ile Gly Ser Ile Val Leu Cys Leu Gln Arg Asp Ser Leu 50 55 60

Tyr Trp Glu Gln Arg Ser Arg Trp Ala Pro Trp Thr Tyr Thr Leu Thr 65 70 75 80

Leu Leu Leu Asn Met Asp Lys Pro Ser 85 90

- (2) INFORMATION FOR SEQ ID NO:132:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 113 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..113
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481731
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:132: Met Gly Ala Leu Asp Leu His Leu Asp Phe Ala Ser Ala Gln His Gly
- 1 5 10 15
  Gln Ala Lys Leu Lys Glu Tyr Ala Lys Ser Ser Leu Leu Ser Asp Gly
  20 25 30
- Asn Tyr Asn Thr Asp Lys Ile Asn Gly Ser Asn Pro Asp Asp Tyr Glu 35 40 45
- Lys Phe Glu Lys Gly Ile Met His Tyr Gly Cys Pro His Tyr Arg Arg 50 55 60
- Arg Cys Arg Ile Arg Ala Pro Cys Cys Asn Glu Ile Phe Asp Cys Arg
- 65 70 75 80

  His Cys His Asn Glu Thr Lys Asn Ser Ile Lys Ile Asp Lys Met Lys

  85 90 95
- Arg His Glu Leu Pro Arg His Glu Val Gln Gln Val Val Cys Ser Leu 100 105 110

Cys

- (2) INFORMATION FOR SEQ ID NO:133:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 709 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..709
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481732
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

attituting tgcctgggcg ttcccaggtg ccatgcgagt agatcggcaa ctactccatc 60 ctcctctccc tacctggcca tcgtgcagca gccgtgctga gcctctgctg ccctctctct 120 ggccactcgc gtgagcccct gctggtcggc tgtccggaca cgacggctat ggccgagccc 180 agegegaagt catectecag gactgageee etgtgeagee actaeegeeg geaggeeteg 240 gtgtccggtt gtgcttcgac aagtcacgcg cctccgacaa acctcgcgcc cgtcgtgttc 300 ttgcctctac gtcaatcgac acgcatagaa tgcgatccat ctccaagctt cgagggatcg 360 aagatcaagc gttggcgacc atgtgatcaa gctctctgag ttctatgagg ctgaagatcc 420 tgagcatctg tttggtgaag attgcctttg gtgcaatcta tgctcaggta aagagggcqt 480 cgaggcggat ctccaggagt tccaggacgt cgacgggttc gaggattagg ctagcgacct 540 cccccagtca gctgcctgtg gtgggttgtt tacgttggct acgtttcgat tctgtgtact 600 ttgatttata ttatgtaaat ggttctagtt tgtaatatta ttacttactc tttattgtaa 660 ttcgaagcat tgtgctatga tgagtcattt atgtaatcgc cgtgtacgc

- (2) INFORMATION FOR SEQ ID NO:134:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 43 amino acids(B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..43
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481733
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

Phe Leu Arg Ala Trp Ala Phe Pro Gly Ala Met Arg Val Asp Arg Gln
1 10 15

Leu Leu His Pro Pro Leu Pro Thr Trp Pro Ser Cys Ser Ser Arg Ala 20 25 30

Glu Pro Leu Leu Pro Ser Leu Trp Pro Leu Ala 35 40

- (2) INFORMATION FOR SEQ ID NO:135:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 76 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..76
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481734
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

Met Ala Glu Pro Ser Ala Lys Ser Ser Ser Arg Thr Glu Pro Leu Cys
1 10 15

Ser His Tyr Arg Arg Gln Ala Ser Val Ser Gly Cys Ala Ser Thr Ser 20 25 30

His Ala Pro Pro Thr Asn Leu Ala Pro Val Val Phe Leu Pro Leu Arg 35 40 45

Gln Ser Thr Arg Ile Glu Cys Asp Pro Ser Pro Ser Phe Glu Gly Ser 50 55 60

Lys Ile Lys Arg Trp Arg Pro Cys Asp Gln Ala Leu 65 70 75

- (2) INFORMATION FOR SEQ ID NO:136:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 76 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..76
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481735
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

Met Arg Leu Lys Ile Leu Ser Ile Cys Leu Val Lys Ile Ala Phe Gly
1 10 15

Ala Ile Tyr Ala Gln Val Lys Arg Ala Ser Arg Arg Ile Ser Arg Ser 20 25 30

Ser Arg Thr Ser Thr Gly Ser Arg Ile Arg Leu Ala Thr Ser Pro Ser 40 45

Gln Leu Pro Val Val Gly Cys Leu Arg Trp Leu Arg Phe Asp Ser Val 50 60

Tyr Phe Asp Leu Tyr Tyr Val Asn Gly Ser Ser Leu 65 '70 75

- (2) INFORMATION FOR SEQ ID NO:137:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 951 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..951
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481740

| (xi) Si    | EQUENCE DES | CRIPTION: SI | EQ ID NO:13 | 7:         |            |     |
|------------|-------------|--------------|-------------|------------|------------|-----|
| attacacaaa | tgtgcgccgc  | catgttctcc   | aatctcttcg  | ccaagtttga | ctacggacga | 60  |
| tcgtctccac | cgaagacgcc  | acacgatgac   | ggccgccgta  | gccacatgtc | tgatctttcc | 120 |
|            | agcctcgacg  |              |             |            |            | 180 |
| gacgacgtca | ctgcggcgcc  | cgtagccgag   | gtgatgagca  | cggaccatgg | cggccacgag | 240 |
| gagtcgtctc | caccgaagac  | gccacacgat   | gacggctgcc  | gtagccacat | gtctgatctt | 300 |
| tccctagaaa | gacagcctcg  | acagtcgtcc   | gtctcggtcc  | gcatggaggc | gcccgtggat | 360 |
| gacgacgacg | tcactkcggc  | gcccgtagcc   | gaggtgatga  | gcatggacca | tggcggccac | 420 |
| gaggagtcgc | cgacggtccc  | gtgcctcgcg   | ttcgcgtccg  | agcacgggta | cagcatcttc | 480 |
| tccctagcct | acatgcgcgd  | tgttcatcga   | cggcgcscac  | ggkttcamag | tcaccgccga | 540 |
| cccagwggga | gcgaaagcga  | aaccgcgtkt   | acgtgattct  | tgccaaycgg | ctaacacmcc | 600 |
| catktggacg | tctggccgtc  | gtgtttgacg   | tcggcttctc  | cgaccttdgg | aggccagagc | 660 |
| scwtggggcg | gctaaagcta  | aacmccggcg   | aggttgascc  | aatktggggc | cagccgcact | 720 |
| ggatcatgcc | trgggataga  | tcggatcgtc   | gtcaaggata  | twtcaactag | tacagtttat | 780 |
| tgtaggtagt | tmcattagtt  | tacatactct   | ggctgtcagg  | cmctatttct | acgtaaagtt | 840 |
| ttttttggca | ttrgggaaat  | atattmcgga   | tctataagat  | attttgrgtt | ttaaaagcta | 900 |
| ctgataaatc | tacatgtacg  | ttgcaatgcg   | aaataaactg  | tgtctatgtt | t          |     |

- (2) INFORMATION FOR SEQ ID NO:138:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 191 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..191
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481741
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:
- Ile
   Thr
   Gln
   Met
   Cys
   Ala
   Ala
   Met
   Phe
   Ser
   Asn
   Leu
   Phe
   Ala
   Lys
   Phe
   Asn
   Leu
   Phe
   Ala
   Lys
   Phe
   Asn
   Leu
   Asn
   Thr

   Asn
   Ser
   His
   Met
   Ser
   Asn
   Leu
   Ser
   Leu
   Glu
   Arg
   Glu
   Arg
   Asn
   Asn
   Asn
   Asn
   Asn
   Asn
   Asn
   Thr
   Asn
   A
- Ala Ala Pro Val Ala Glu Val Met Ser Thr Asp His Gly Gly His Glu 65 70 75 80
- Glu Ser Ser Pro Pro Lys Thr Pro His Asp Asp Gly Cys Arg Ser His 85 90 95
- Met Ser Asp Leu Ser Leu Glu Arg Gln Pro Arg Gln Ser Ser Val Ser
- Val Arg Met Glu Ala Pro Val Asp Asp Asp Val Thr Xaa Ala Pro 115 120 125
- Val Ala Glu Val Met Ser Met Asp His Gly Gly His Glu Glu Ser Pro 130 135 140
- Thr Val Pro Cys Leu Ala Phe Ala Ser Glu His Gly Tyr Ser Ile Phe 145 150 155 160
- Ser Leu Ala Tyr Met Arg Xaa Val His Arg Arg Arg Xaa Arg Xaa Xaa
- Ser His Arg Arg Pro Xaa Gly Ser Glu Ser Glu Thr Ala Xaa Thr 180 185 190
- (2) INFORMATION FOR SEQ ID NO:139:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 188 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..188
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481742
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:
- Met Cys Ala Ala Met Phe Ser Asn Leu Phe Ala Lys Phe Asp Tyr Gly
  1 5 10 15
- Arg Ser Ser Pro Pro Lys Thr Pro His Asp Asp Gly Arg Arg Ser His 20 25 30
- Met Ser Asp Leu Ser Leu Glu Arg Gln Pro Arg Arg Ser Ser Val Ser 35 40 45
- Val Arg Met Glu Ala Pro Val Asp Asp Asp Val Thr Ala Ala Pro 50 60
- Val Ala Glu Val Met Ser Thr Asp His Gly Gly His Glu Glu Ser Ser 65 70 75 80
- Pro Pro Lys Thr Pro His Asp Asp Gly Cys Arg Ser His Met Ser Asp
- Leu Ser Leu Glu Arg Gln Pro Arg Gln Ser Ser Val Ser Val Arg Met
  100 105 110
- Glu Ala Pro Val Asp Asp Asp Val Thr Xaa Ala Pro Val Ala Glu 115 120 125
- Val Met Ser Met Asp His Gly Gly His Glu Glu Ser Pro Thr Val Pro
  130 135 140
- Cys Leu Ala Phe Ala Ser Glu His Gly Tyr Ser Ile Phe Ser Leu Ala 145 150 155 160
- Tyr Met Arg Xaa Val His Arg Arg Arg Xaa Arg Xaa Xaa Ser His Arg
- Arg Pro Xaa Gly Ser Glu Ser Glu Thr Ala Xaa Thr 180 185
- (2) INFORMATION FOR SEQ ID NO:140:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 184 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..184
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481743
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:
- Met Phe Ser Asn Leu Phe Ala Lys Phe Asp Tyr Gly Arg Ser Ser Pro 1 5 10 15
- Pro Lys Thr Pro His Asp Asp Gly Arg Arg Ser His Met Ser Asp Leu
  20 25 30
- Ser Leu Glu Arg Gln Pro Arg Arg Ser Ser Val Ser Val Arg Met Glu 35 40 45
- Ala Pro Val Asp Asp Asp Val Thr Ala Ala Pro Val Ala Glu Val
  50 55 60
- Met Ser Thr Asp His Gly Gly His Glu Glu Ser Ser Pro Pro Lys Thr 65 70 75 80
- Pro His Asp Asp Gly Cys Arg Ser His Met Ser Asp Leu Ser Leu Glu 85 90 95
- Arg Gln Pro Arg Gln Ser Ser Val Ser Val Arg Met Glu Ala Pro Val 100 105 110
- Asp Asp Asp Val Thr Xaa Ala Pro Val Ala Glu Val Met Ser Met 115 120 125
- Asp His Gly Gly His Glu Glu Ser Pro Thr Val Pro Cys Leu Ala Phe

|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Glu | His | Gly | Tyr | Ser | Ile | Phe | Ser | Leu | Ala | Tyr | Met | Arg | Xaa |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | His | Arg | Arg |     | Xaa | Arg | Xaa | Xaa |     | His | Arg | Arg | Pro | Xaa | Gly |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ser | Glu | Ser | Glu | Thr | Ala | Xaa | Thr |     |     |     |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |

- (2) INFORMATION FOR SEQ ID NO:141:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 432 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..432
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481744
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

| agttctaaac | cctaaacctg | acgccgccat | ggccgccgcc | gttcgccaca | tcgtgcgccg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ccgcctctcc | acggccgccg | ccatcactgc | accggtcccc | actccggcct | ccatcctcaa | 120 |
| cccgtcctcg | ccgagcactc | ccctcacctc | gcgacataag | acccgactcg | ccatctccct | 180 |
| cctcaagtct | tccccgccgc | ctcccccga  | ccagatcctc | tccatttgcc | gcgccgcgca | 240 |
| ctgaccccgg | agacacacat | cgaccgcatc | gcgctgtcgc | tagccgcatc | aaagctctcc | 300 |
| tacgatacgg | acaccctccg | tgacctcgcc | tccacmgtcc | tcaccccgcg | cmamgcaccc | 360 |
| cacgcmatcg | cgctcttcgg | ccaggcacam | ctcctccccg | acgssatctc | cactttccag | 420 |
| tcctccccct | CC         |            |            |            |            |     |

- (2) INFORMATION FOR SEQ ID NO:142:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 80 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..80
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481745
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

Val Leu Asn Pro Lys Pro Asp Ala Ala Met Ala Ala Ala Val Arg His
1 10 15

Ile Val Arg Arg Arg Leu Ser Thr Ala Ala Ala Ile Thr Ala Pro Val 20 25 30

Pro Thr Pro Ala Ser Ile Leu Asn Pro Ser Ser Pro Ser Thr Pro Leu 35 40 45

Thr Ser Arg His Lys Thr Arg Leu Ala Ile Ser Leu Leu Lys Ser Ser 50 60

Pro Pro Pro Pro Pro Asp Gln Ile Leu Ser Ile Cys Arg Ala Ala His 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO:143:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 71 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..71
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481746
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:
- Met Ala Ala Ala Val Arg His Ile Val Arg Arg Arg Leu Ser Thr Ala

  1 10 15
- Ala Ala Ile Thr Ala Pro Val Pro Thr Pro Ala Ser Ile Leu Asn Pro 20 25 30
- Ser Ser Pro Ser Thr Pro Leu Thr Ser Arg His Lys Thr Arg Leu Ala 35 40 45
- Ile Ser Leu Leu Lys Ser Ser Pro Pro Pro Pro Pro Asp Gln Ile Leu
  50 60
- Ser Ile Cys Arg Ala Ala His 65 70
- (2) INFORMATION FOR SEQ ID NO:144:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 557 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
      (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..557
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481747
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:144: agacteegge caeageegag acgagactag cageageege ttgeteagat eggeagette 60 ggcggcggcg gagatggcga ttcggtactg gccgatggcc ggagcagccg ttgggttccg 120 cctcgtcctg gttctcttcg gcggggatct ccaccttgcc tctcgccctg aggtctccac 180 ccccctcacc tcccttcgcc gcctggcgga aggctactgg ctgaagcaag cgtccgtgtc 240 accetactcc gettctatet atcaceettc cccattectc ctetetettc tteetccatt 300 aactagtagc aggcctgacg gacatcatgc tcatatttac tgcagtttga tttttgtggc 360 tgtagatttt ctagcagcca tgctcatccg agcgactggg catgaactcg aaatggcacg 420 gaacagaagt ttgaagtcac ttgacctcac aaaggcagtw aaggatacag ttaatgtaag 480 cgctggagat gttgcttctc tcatatattt gtggaaccct tgggcaatag tcacttgtgt gggatcatgt acatcac
- (2) INFORMATION FOR SEQ ID NO:145:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 185 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..185
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481748
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:
- Asp Ser Gly His Ser Arg Asp Glu Thr Ser Ser Ser Arg Leu Leu Arg  $1 \\ 5 \\ 10 \\ 15$
- Ser Ala Ala Ser Ala Ala Ala Glu Met Ala Ile Arg Tyr Trp Pro Met
- Ala Gly Ala Ala Val Gly Phe Arg Leu Val Leu Val Leu Phe Gly Gly
  35
  40
  45
- Asp Leu His Leu Ala Ser Arg Pro Glu Val Ser Thr Pro Leu Thr Ser 50 55 60
- Leu Arg Arg Leu Ala Glu Gly Tyr Trp Leu Lys Gln Ala Ser Val Ser 65 70 75 80
- Pro Tyr Ser Gly Ser Met Tyr His Gly Ser Pro Leu Leu Ser Val

Val Thr Cys Val Gly Ser Cys Thr Ser 180 185

- (2) INFORMATION FOR SEQ ID NO:146:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 161 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..161
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481749
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:
- Met Ala Ile Arg Tyr Trp Pro Met Ala Gly Ala Ala Val Gly Phe Arg

  1 10 15
- Leu Val Leu Val Leu Phe Gly Gly Asp Leu His Leu Ala Ser Arg Pro 20 25 30
- Glu Val Ser Thr Pro Leu Thr Ser Leu Arg Arg Leu Ala Glu Gly Tyr 35 40 45
- Trp Leu Lys Gln Ala Ser Val Ser Pro Tyr Ser Gly Ser Met Tyr His 50 55 60
- Gly Ser Pro Leu Leu Ser Val Leu Gly Pro Leu Thr Ser Ser Arg
  65 70 75 80
- Pro Asp Gly His His Ala His Ile Tyr Cys Ser Leu Ile Phe Val Ala
- Val Asp Phe Leu Ala Ala Met Leu Ile Arg Ala Thr Gly His Glu Leu 100 105 110
- Glu Met Ala Arg Asn Arg Ser Leu Lys Ser Leu Asp Leu Thr Lys Ala 115 120 125
- Xaa Lys Asp Thr Val Asn Val Ser Ala Gly Asp Val Ala Ser Leu Ile 130 140
- Tyr Leu Trp Asn Pro Trp Ala Ile Val Thr Cys Val Gly Ser Cys Thr 145 150 155 160 Ser
- (2) INFORMATION FOR SEQ ID NO:147:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 154 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..154
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481750
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

|            | _          | _           | _          |           |            |            |           |            |           |           |            |           |            |           |           |     |
|------------|------------|-------------|------------|-----------|------------|------------|-----------|------------|-----------|-----------|------------|-----------|------------|-----------|-----------|-----|
| Met<br>1   | Ala        | Gly         | Ala        | Ala<br>5  | Val        | Gly        | Phe       | Arg        | Leu<br>10 | Val       | Leu        | Val       | Leu        | Phe<br>15 | Gly       |     |
| Gly        | Asp        | Leu         | His<br>20  | Leu       | Ala        | Ser        | Arg       | Pro<br>25  |           | Val       | Ser        | Thr       | Pro<br>30  |           | Thr       |     |
| Ser        | Leu        | Arg<br>35   | Arg        | Leu       | Ala        | Glu        | Gly<br>40 |            | Trp       | Leu       | Lys        | Gln<br>45 |            | Ser       | Val       |     |
| Ser        | Pro<br>50  | Tyr         | Ser        | Gly       | Ser        | Met<br>55  | Tyr       | His        | Gly       | Ser       | Pro<br>60  |           | Leu        | Leu       | Ser       |     |
| Val<br>65  | Leu        | Gly         | Pro        | Leu       | Thr<br>70  | Ser        | Ser       | Arg        | Pro       | Asp<br>75 | Gly        | His       | His        | Ala       | His<br>80 |     |
| Ile        | Tyr        | Cys         | Ser        | Leu<br>85 | Ile        | Phe        | Val       | Ala        | Val<br>90 | Asp       | Phe        | Leu       | Ala        | Ala<br>95 | Met       |     |
| Leu        | Ile        | Arg         | Ala<br>100 | Thr       | Gly        | His        | Glu       | Leu<br>105 | Glu       | Met       | Ala        | Arg       | Asn<br>110 | Arg       | Ser       |     |
|            |            | 115         |            |           | Leu        |            | 120       |            |           |           | _          | 125       |            |           |           |     |
| Ser        | Ala<br>130 | Gly         | Asp        | Val       | Ala        | Ser<br>135 | Leu       | Ile        | Tyr       | Leu       | Trp<br>140 | Asn       | Pro        | Trp       | Ala       |     |
|            | Val        | Thr         | Cys        | Val       | Gly        | Ser        | Cys       | Thr        | Ser       |           |            |           |            |           |           |     |
| 145<br>(2) | TNEC       | יי ע זא כוו | TON        | EOB       | 150<br>SEQ | TD X       | TO - 1 /  | 10.        |           |           |            |           |            |           |           |     |
| (2)        |            |             |            |           | IARAC      |            |           |            |           |           |            |           |            |           |           |     |
|            | ( - )      |             |            |           | 1: 38      |            |           |            | •         |           |            |           |            |           |           |     |
|            |            |             |            |           | nucl       |            | _         |            | •         |           |            |           |            |           |           |     |
|            |            |             |            |           | DEDNE      |            |           |            |           |           |            |           |            |           |           |     |
|            |            |             |            |           | GY:        |            | _         | 310        |           |           |            |           |            |           |           |     |
|            | (ii)       |             |            |           | PE:        |            |           | omic       | • )       |           |            |           |            |           |           |     |
|            |            |             | TURE       |           |            |            | ( 50.     |            | ,         |           |            |           |            |           |           |     |
|            | , ,        |             |            |           | EY:        | _          |           |            |           |           |            |           |            |           |           |     |
|            |            | ,           |            |           | ON:        |            | 80        |            |           |           |            |           |            |           |           |     |
|            |            | ( [         | ro (c      | HER       | INFO       | RMAT       | 'ION:     | / (        | eres      | Sec       | . ID       | 148       | 1755       | ,         |           |     |
|            | (xi)       |             |            |           | SCRI       |            |           |            |           |           |            |           |            |           |           |     |
| acaa       | gcaa       | igt g       | gcca       | cctt      | t ga       | gtgg       | atgt      | : tgg      | gaaga     | aat       | agca       | igcca     | ca a       | gcaa      | agtagt    | 60  |
| cacc       | tgtg       | rtc a       | tctt       | atto      | c ga       | tcct       | agsc      | : cct      | ccca      | tct       | ccaa       | wkco      | tc g       | stto      | cctcct    | 120 |
| ccct       | tctc       | ta g        | ittet      | ctga      | it co      | tcag       | cact      | tag        | cato      | aag       | ctta       | gsac      | ac c       | ggcg      | gagatg    | 180 |
| gcct       | ccan       | ict c       | camo       | ttcc      | t gt       | ccam       | acto      | gcc        | agca      | ggt       | ccgc       | ggca      | igc c      | gata      | agcctg    | 240 |
| ygca       | mgcc       | gt g        | ccgt       | cctt      | c go       | caag       | atco      | , tca      | iggtt     | ctt       | gccc       | gege      | ar g       | cgca      | agatca    | 300 |
|            |            |             | gcaa       |           |            | gctg       | CCCa      | cgc        | cgar      | ggc       | ggcg       | gtgt      | .cg g      | gcac      | gagaa     | 360 |
|            | _          | -           | -          | -         | SEQ        | TD N       | 0.14      | ٥.         |           |           |            |           |            |           |           |     |
| (2)        |            |             |            |           | IARAC      |            |           |            |           |           |            |           |            |           |           |     |
|            | ( - )      |             |            |           | i: 67      |            |           |            | !         |           |            |           |            |           |           |     |
|            |            |             |            |           | amin       |            |           | .0101      |           |           |            |           |            |           |           |     |
|            |            |             |            |           | EDNE       |            |           |            |           |           |            |           |            |           |           |     |
|            |            | (D          | ) TC       | POLC      | GY:        | line       | ar        |            |           |           |            |           |            |           |           |     |
|            | (ii)       | MOL         | ECUL       | E TY      | PE:        | pept       | ide       |            |           |           |            |           |            |           |           |     |
|            | (ix)       |             | TURE       |           |            |            |           |            |           |           |            |           |            |           |           |     |
|            |            |             |            |           | EY:        |            |           |            |           |           |            |           |            |           |           |     |
|            |            |             |            |           | ON:        |            |           |            |           |           |            |           |            |           |           |     |
|            |            |             |            |           | INFO       |            |           |            |           |           |            | 148       | 1756       |           |           |     |
| Mari       |            |             |            |           | SCRI       |            |           |            |           |           |            | _         | _          | _         |           |     |
| Met        | Ата        | ser         | хаа        | ser       | хаа        | rne        | Leu       | ser        | Xaa       | Leu       | A⊥a        | Ser       | Arg        | Ser       | Ala       |     |

 Met
 Ala
 Ser
 Xaa
 Ser
 Xaa
 Phe
 Leu
 Ser
 Xaa
 Leu
 Ala
 Leu
 Ala
 Ser
 Arg
 Ser
 Ala

 Ala
 Ala
 Asp
 Ser
 Leu
 Xaa
 Xaa
 Pro
 Cys
 Arg
 Pro
 Ser
 Pro
 Arg
 Ser
 Ser

 Ala
 Asp
 Cys
 Pro
 Arg
 Xaa
 Arg
 Arg
 Arg
 Arg
 Arg
 Ala
 Arg
 Ala
 Arg
 Ala
 Arg
 Glu
 Gly
 Ala
 Val

 Cys
 Cys
 Pro
 Arg
 Arg
 Arg
 Arg
 Cys
 Arg
 Ala
 Arg
 Ala
 Arg
 Ala
 Arg
 Ala
 Arg
 Ala
 Arg
 Ala
 Arg
 A

Glu Gln Ala

65

- (2) INFORMATION FOR SEQ ID NO:150:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 482 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..482
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481764
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

etgttettee acetgetgge tgcweetgee teeeetgege eccaaaceca ecegeetege 60 cgtccccgca gccgcagcct gctctcggct cccgccgccg tctaccgcgt cctgcggctg 120 cggtgttgcg tcacctcggg ttcgccttaa cttccacaat cctcgccgtc ctggtgctcc 180 gccgcccctc cctttgtact cgcgctggag ctgcagatcc accgcgacct ggcgaccaat 240 tectectece getgaagaat tggegaeett ggeeteegem eeeqeggege gaggagteaa 300 ctgtggtagc aaccaccgcg gaggctgcaa gcttcggtaa gggaggaaag ttgacttgtt 360 ggaagccggt ccagggccgc gatgacgtcg acagccgccg ggcgtcgtcg tcggcggcga 420 agagcgagtc ctacctgcgg gccgacaaga tcgacctcga gagcctggac atccagctgg 480

- (2) INFORMATION FOR SEQ ID NO:151:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 112 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..112
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481765
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

Cys Ser Ser Thr Cys Trp Leu Xaa Leu Pro Pro Leu Arg Pro Lys Pro 1 5 10 15

Thr Arg Leu Ala Val Pro Ala Ala Ala Cys Ser Arg Leu Pro Pro 20 25 30

Pro Ser Thr Ala Ser Cys Gly Cys Gly Val Ala Ser Pro Arg Val Arg
35 40 45

Leu Asn Phe His Asn Pro Arg Arg Pro Gly Ala Pro Pro Pro Leu Pro 50 55 60

Leu Tyr Ser Arg Trp Ser Cys Arg Ser Thr Ala Thr Trp Arg Pro Ile 65 70 75 80

Pro Pro Pro Ala Glu Glu Leu Ala Thr Leu Ala Ser Xaa Pro Ala Ala 85 90 95

Arg Gly Val Asn Cys Gly Ser Asn His Arg Gly Gly Cys Lys Leu Arg 100 105 110

- (2) INFORMATION FOR SEQ ID NO:152:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 160 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

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- (A) NAME/KEY: peptide (B) LOCATION: 1..160
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481766

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

Val Leu Pro Pro Ala Gly Cys Xaa Cys Leu Pro Cys Ala Pro Asn Pro 10

Pro Ala Ser Pro Ser Pro Gln Pro Gln Pro Ala Leu Gly Ser Arg Arg 20 25

Arg Leu Pro Arg Pro Ala Ala Ala Val Leu Arg His Leu Gly Phe Ala 40

Leu Thr Ser Thr Ile Leu Ala Val Leu Val Leu Arg Arg Pro Ser Leu 55

Cys Thr Arg Ala Gly Ala Ala Asp Pro Pro Arg Pro Gly Asp Gln Phe 7.0

Leu Leu Pro Leu Lys Asn Trp Arg Pro Trp Pro Pro Xaa Pro Arg Arg 85 90

Glu Glu Ser Thr Val Val Ala Thr Thr Ala Glu Ala Ala Ser Phe Gly 100 105

Lys Gly Gly Lys Leu Thr Cys Trp Lys Pro Val Gln Gly Arg Asp Asp 120 125

Val Asp Ser Arg Arg Ala Ser Ser Ser Ala Ala Lys Ser Glu Ser Tyr 135 140

Leu Arg Ala Asp Lys Ile Asp Leu Glu Ser Leu Asp Ile Gln Leu Glu 150

- (2) INFORMATION FOR SEQ ID NO:153:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 376 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..376
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481770
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

ggactcacga agcagcacac tctgcactct cggcaacaac tgacggccgg aggaagaagg 60 cgcagacgac aagcagaagc ttgtgccatc gatcaatggc ggcggtgaca aagatctacg 120 tegtgtacta etegacgtac ggheaegtgg egargetgge ggaggagate aagaagggeg 180 ccgactccgt ggacggcgtc gaggcaacca tctggcargw agcggaracg ctgccggavg 240 argcgctggc gaagatgcrc gcaccggcga ggagcgagga gcacccggtg atctcgggca 300 arcagetggt ggacgergae ggeatectgt teggetteee rgcreggtte ggeatgatgg 360 crgcgcagat gaaggc

- (2) INFORMATION FOR SEQ ID NO:154:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 124 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..124
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481771
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

Thr His Glu Ala Ala His Ser Ala Leu Ser Ala Thr Thr Asp Gly Arg 10

Arg Lys Lys Ala Gln Thr Thr Ser Arg Ser Leu Cys His Arg Ser Met
20 25 30

Ala Ala Val Thr Lys Ile Tyr Val Val Tyr Tyr Ser Thr Tyr Xaa His

35 40 45

Val Ala Xaa Leu Ala Glu Glu Ile Lys Lys Gly Ala Asp Ser Val Asp 50 55 60

Gly Val Glu Ala Thr Ile Trp Xaa Xaa Ala Xaa Thr Leu Pro Xaa Xaa 65 70 75 80

Ala Leu Ala Lys Met Xaa Ala Pro Ala Arg Ser Glu Glu His Pro Val 85 90 95

Ile Ser Gly Xaa Gln Leu Val Asp Xaa Asp Gly Ile Leu Phe Gly Phe 100 105 110

Xaa Xaa Arg Phe Gly Met Met Xaa Ala Gln Met Lys 115 120

- (2) INFORMATION FOR SEQ ID NO:155:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 93 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..93
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481772
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

Met Ala Ala Val Thr Lys Ile Tyr Val Val Tyr Tyr Ser Thr Tyr Xaa 1 10 15

His Val Ala Xaa Leu Ala Glu Glu Ile Lys Lys Gly Ala Asp Ser Val 20 25 30

Asp Gly Val Glu Ala Thr Ile Trp Xaa Xaa Ala Xaa Thr Leu Pro Xaa 35 40 45

Xaa Ala Leu Ala Lys Met Xaa Ala Pro Ala Arg Ser Glu Glu His Pro 50 55 60
Val Ile Ser Gly Xaa Gln Leu Val Asp Xaa Asp Gly Ile Leu Phe Gly

65 70 75 80

Phe Xaa Xaa Arg Phe Gly Met Met Xaa Ala Gln Met Lys 85 90

- (2) INFORMATION FOR SEQ ID NO:156:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 448 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..448
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481775
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

attgagtata ggtttgctct cctacacttt tttgagaaag acattgaagg atgacatagt tgttccaatg cttgatttta agatccaaga tggggacatt gtaccgttgg tgtatggttc 120 acagggtgat tgggatagta gtctgaagat agtacttgat tggtcccctt tttcttcgaa ggaagaactt ctgcagcagt ttcaggatgt tggtagtcat ggaactaaag tggtagtgta 240 caatttatgg atgaatgatg atggcctttt ggaacttgac tttgaggatg atgatgaga 300 catattactt agagatcaag gtagcgcaag tsvgggggtt ctcaaaagagt cagaaagaaa 360 ttgttaagca acacatatcc cacaggctca gakttttcat tgcgagctta tacctccatc 420 ctttacctca ggaagtttga taatttcc

(2) INFORMATION FOR SEQ ID NO:157:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 121 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..121
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481776
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

Leu Ser Ile Gly Leu Leu Ser Tyr Thr Phe Leu Arg Lys Thr Leu Lys

5 10 15

Asp Asp Ile Val Val Pro Met Leu Asp Phe Lys Ile Gln Asp Gly Asp 20 25 30

Ile Val Pro Leu Val Tyr Gly Ser Gln Gly Asp Trp Asp Ser Ser Leu 35 40 45

Lys Ile Val Leu Asp Trp Ser Pro Phe Ser Ser Lys Glu Glu Leu Leu 50

Gln Gln Phe Gln Asp Val Gly Ser His Gly Thr Lys Val Val Tyr
65 70 . 75 80

Asn Leu Trp Met Asn Asp Asp Gly Leu Leu Glu Leu Asp Phe Glu Asp 85 90 95

Asp Asp Glu Asp Ile Leu Leu Arg Asp Gln Gly Ser Ala Ser Xaa Gly
100 105 110

Val Leu Lys Glu Ser Glu Arg Asn Cys 115 120

- (2) INFORMATION FOR SEQ ID NO:158:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 99 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..99
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481777
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

Met Leu Asp Phe Lys Ile Gln Asp Gly Asp Ile Val Pro Leu Val Tyr 1 5 10 15

Gly Ser Gln Gly Asp Trp Asp Ser Ser Leu Lys Ile Val Leu Asp Trp 20 25 30

Ser Pro Phe Ser Ser Lys Glu Glu Leu Leu Gln Gln Phe Gln Asp Val

Gly Ser His Gly Thr Lys Val Val Val Tyr Asn Leu Trp Met Asn Asp
50 55 60

Asp Gly Leu Leu Glu Leu Asp Phe Glu Asp Asp Asp Glu Asp Ile Leu 65 70 75 80

Leu Arg Asp Gln Gly Ser Ala Ser Xaa Gly Val Leu Lys Glu Ser Glu 85 90 95

Arg Asn Cys

- (2) INFORMATION FOR SEQ ID NO:159:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 61 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..61
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481778
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

Met Met Met Ala Phe Trp Asn Leu Thr Leu Arg Met Met Met Arg Thr
1 10 15

Tyr Tyr Leu Glu Ile Lys Val Ala Gln Xaa Xaa Gly Phe Ser Lys Ser 20 25 30

Gln Lys Glu Ile Val Lys Gln His Ile Ser His Arg Leu Arg Xaa Phe 35 40 45

Ile Ala Ser Leu Tyr Leu His Pro Leu Pro Gln Glu Val 50 55 60

- (2) INFORMATION FOR SEQ ID NO:160:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 657 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..657
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481779
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:160: attatggatt agcgcctgca taacagacca ccagggaatt ccgctctcac ctcattgggg 60 tcctggtggg cgaataagca ccaagccctc cgcttggatc grccatcgtg cgcgtccctt 120 gctcgcgtcg agagatttcc aacgccgagc tagcgcacag ggaagggaga gaaaagtgag 180 tgccaccgcg gggacgaggg aaactcgact caccacctat cgctccttgg agttgtgtcc 240 tggggattct ccgggcttgg aggaggaagg ttgaagcagc tcttccgggg attcgtgttc 300 aacgttgtgg gaattcctcg ccaccaggaa ctaccctgcc gtggaccgcg ggtccgcgtg 360 gccaagactg tectegetge tageettgae gageaageea cacatgateg agtgetteag 420 taggtggaga ctgctgagca ggagctcatt gaagcccccc acaggagaag aacatgtggt 480 tcaagaggag ccacacaatg aggagttcca cttgatctag gtgtcgtttc ccagttgact 540 ttatggcgcc aaggatggac atttgttcgt tttatattat tattttgtaa gacttccgct 600 atgtaataag tactctgatt atattgtgac atttatctct atacactctg ttattgt
- (2) INFORMATION FOR SEQ ID NO:161:
  - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 90 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..90
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481780
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:
- Leu Trp Ile Ser Ala Cys Ile Thr Asp His Gln Gly Ile Pro Leu Ser 1 5 10 15
- Pro His Trp Gly Pro Gly Gly Arg Ile Ser Thr Lys Pro Ser Ala Trp 20 25 30
- Ile Xaa His Arg Ala Arg Pro Leu Leu Ala Ser Arg Asp Phe Gln Arg 35 40 45
- Arg Ala Ser Ala Gln Gly Arg Glu Arg Lys Val Ser Ala Thr Ala Gly 50 60
- Thr Arg Glu Thr Arg Leu Thr Thr Tyr Arg Ser Leu Glu Leu Cys Pro 65 70 75 80

Gly Asp Ser Pro Gly Leu Glu Glu Glu Gly 85 90

- (2) INFORMATION FOR SEQ ID NO:162:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 413 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..413
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481789
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

  ctgctcgctc tctccctctc gtcgcttct ttcctggtcg cgccgcctt catcaggtct cctccgcctt agccggtgaa gagcgaccag gcccaataaa taatcaccat ggctcatcaa agcgtgaag gcagctacgc cgatgatgat agtacatcca agcgcatcaa aggcaccgac 180 actgcttctg aaacgggga cagtgtagag tctagtgtt cacagcaaat ggatgctgaa gctaggagga cctgccaaaa ggaaagcgaa caccatcgga caaatgcgtt tcagatgggg aatgcgctgc aaactctaag gttttggggt aagcagaaga kggtattgac tgttgtcgag gctgatgcgg cggacgacaa gggttgcagg cacactatgg aggacgcctg ggk
- (2) INFORMATION FOR SEQ ID NO:163:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 101 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..101
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481790
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

Met Ala His Gln Lys Arg Glu Gly Ser Tyr Ala Asp Asp Ser Thr

1 5 10 15 15

Ser Lys Arg Ile Lys Gly Thr Asp Thr Ala Ser Glu Thr Gly Asp Ser 20 25 30 Val Glu Ser Ser Val Ser Gln Gln Met Asp Ala Glu Ala Arg Arg Thr

35 40 45 Cys Gln Lys Glu Ser Glu His His Arg Thr Asn Ala Phe Gln Met Gly

Cys Gln Lys Glu Ser Glu His His Arg Thr Ash Ald Fhe Gln Met Gly
50 55 60

Asn Ala Leu Gln Thr Leu Arg Phe Trp Gly Lys Gln Lys Xaa Val Leu 65 70 75 80

Thr Val Val Glu Ala Asp Ala Ala Asp Asp Lys Gly Cys Arg His Thr
85 90 95

Met Glu Asp Ala Trp

100

- (2) INFORMATION FOR SEQ ID NO:164:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 61 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..61
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481791
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

Met Asp Ala Glu Ala Arg Arg Thr Cys Gln Lys Glu Ser Glu His His 1  $\phantom{0}$  5  $\phantom{0}$  10  $\phantom{0}$  15 Arg Thr Asn Ala Phe Gln Met Gly Asn Ala Leu Gln Thr Leu Arg Phe 20  $\phantom{0}$  25  $\phantom{0}$  30

Trp Gly Lys Gln Lys Xaa Val Leu Thr Val Val Glu Ala Asp Ala Ala 35 40 45

Asp Asp Lys Gly Cys Arg His Thr Met Glu Asp Ala Trp 50 55 60

- (2) INFORMATION FOR SEQ ID NO:165:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 460 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..460
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481792
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

atcaaggaac agtgcaaact agaagaaacc tccgtcatca gcgacctctc cccaacggcg 60 ccgacgatgg cgcaacagca gacgcagcta accactggct cgggcatcct ggatgccgtc 120 ccgctcttcg tcgtcatcct cctcgcggcc cacgtcctgg ccctcgtgtt ctggatgtac 180 aagctggctt ccgagaagca accaccccgg aggaagacac agtgacggcg ccgatctacg 240 ccatcggcga gtccttcgct agcctcttta tcggttccat tttcatgtga accagtaccc 300 tccagaacat tcaggccgtc aattattcag agatatccat atagtcttc aatttgttt 360 atttatactt attgcattt gggtatat ttgataacaac ttagcgatat tctatgaatc 420 actatccgtt tgggtgataa ataaatgttc ctagtttag

- (2) INFORMATION FOR SEQ ID NO:166:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 74 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..74
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481793
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

Ile Lys Glu Gln Cys Lys Leu Glu Glu Thr Ser Val Ile Ser Asp Leu

1 10 15

Ser Pro Thr Ala Pro Thr Met Ala Gln Gln Gln Thr Gln Leu Thr Thr 20 25 30

Gly Ser Gly Ile Leu Asp Ala Val Pro Leu Phe Val Val Ile Leu Leu 35 40 45

Ala Ala His Val Leu Ala Leu Val Phe Trp Met Tyr Lys Leu Ala Ser 50 60

- Glu Lys Gln Pro Pro Arg Arg Lys Thr Gln 65 70
- (2) INFORMATION FOR SEQ ID NO:167:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 95 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..95
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481794
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:
- Gln Gly Thr Val Gln Thr Arg Arg Asn Leu Arg His Gln Arg Pro Leu

  1 10 15
- Pro Asn Gly Ala Asp Asp Gly Ala Thr Ala Asp Ala Ala Asn His Trp
  20 25 30
- Leu Gly His Pro Gly Cys Arg Pro Ala Leu Arg Arg His Pro Pro Arg 35 40 45
- Gly Pro Arg Pro Gly Pro Arg Val Leu Asp Val Gln Ala Gly Phe Arg 50 60
- Glu Ala Thr Thr Pro Glu Glu Asp Thr Val Thr Ala Pro Ile Tyr Ala 65 70 75 80
- Ile Gly Glu Ser Phe Ala Ser Leu Phe Ile Gly Ser Ile Phe Met 85 90 95
- (2) INFORMATION FOR SEQ ID NO:168:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 52 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..52
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481795
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:
- Met Ala Gln Gln Gln Thr Gln Leu Thr Thr Gly Ser Gly Ile Leu Asp
  1 10 15
- Ala Val Pro Leu Phe Val Val Ile Leu Leu Ala Ala His Val Leu Ala 20 25 30
- Leu Val Phe Trp Met Tyr Lys Leu Ala Ser Glu Lys Gln Pro Pro Arg 35 40 45

Arg Lys Thr Gln

- (2) INFORMATION FOR SEQ ID NO:169:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 761 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..761
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481796
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:
- aggacaacga gacgtctgam ggcgtgargc tgagaccaaa ggagaacaga nacggarang 60 120 gcgtcaatcg ggtcctccaa catcggattc cagctgctga agaagtctgg ttggaaggag 180 ggcactggcc ttrgagcgca ggagcaggga aggttggaac ctgtagagac tcgtgttaag 240 aataacaagc gtggtatagg ttctaaagaa ccaaaaccac aacctaaggt tgaggatgac 300 attgaaacac atcctcaaaa gcccaagcag gaaatgcaat caaagaaaag ggcaaaatta 360 gctgcaaaga ggataagaaa actgcaagaa gaggagaagc gcttgaaaga gaaggaattc 420 gragatggct tttttcaggg aatttttggc ctgataatgt ggtaaggcag aaacttcaac 480 acttgacaat gtagctgctg acttttgsct gatatagtgg atgtataggc ttgcaaaacq 540 cttggcctac aaaatgttac cccattcatt ccgtggatga tttcacacat gatttgtggc 600 tagggttggc acaaagctgt tcatccatgt agtggacaaa tctagtgtag aattgcccat 660 gctatgtgat cttgtaattt ttatacatta taaatcttgt ttttttttgt tcatataact 720

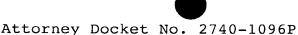
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gtgctcaata ttttgccttg ccaatgcaaa tatttaaatc t
(2) INFORMATION FOR SEQ ID NO:170:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 78 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..78
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481797
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:
Asp Asn Glu Thr Ser Xaa Gly Val Xaa Leu Arg Pro Lys Glu Asn Arg
                                     10
Xaa Gly Xaa Glu Xaa Xaa Gly Pro Gly Ala Gly Ala Trp Arg Val Gly
Glu Glu Lys Arg Arg Gly Asp Gly Val Asn Arg Val Leu Gln His Arg
                            40
Ile Pro Ala Ala Glu Glu Val Trp Leu Glu Gly Gly His Trp Pro Xaa
Ser Ala Gly Ala Gly Lys Val Gly Thr Cys Arg Asp Ser Cys
                    70
(2) INFORMATION FOR SEQ ID NO:171:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 115 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..115
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481798
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:
Met Ala Ser Ile Gly Ser Ser Asn Ile Gly Phe Gln Leu Leu Lys Lys
                                    10
Ser Gly Trp Lys Glu Gly Thr Gly Leu Xaa Ala Gln Glu Gln Gly Arg
                                 25
Leu Glu Pro Val Glu Thr Arg Val Lys Asn Asn Lys Arg Gly Ile Gly
                            40
Ser Lys Glu Pro Lys Pro Gln Pro Lys Val Glu Asp Asp Ile Glu Thr
                        55
His Pro Gln Lys Pro Lys Gln Glu Met Gln Ser Lys Lys Arg Ala Lys
                    70
                                         75
Leu Ala Ala Lys Arg Ile Arg Lys Leu Gln Glu Glu Glu Lys Arg Leu
                                     90
                85
Lys Glu Lys Glu Phe Xaa Asp Gly Phe Phe Gln Gly Ile Phe Gly Leu
            100
                                105
                                                     110
Ile Met Trp
        115
(2) INFORMATION FOR SEQ ID NO:172:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 712 base pairs
```

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:



(A) NAME/KEY: -

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- (B) LOCATION: 1..712
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481799
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:172: gtttatcttg gacaaaggaa ctaagtgaat ggactatgtt tacttgagta gattgaagag 60 tggttatgtt tctaaaacaa atatagtgtg ctaatttgca agatgctacc attatgacat 120 tgtctgctac tgaaatctgc ttgtcacgcc agaaatagac atgctttatt tttgttttct 180 atccttgtca atttttccgg caattgaaat tgttactgtg tcaattctta cagtttgcat 240 agtttgttga atgtactttt acttttaccg tagtacaatg ctaatgtaga atactgtaac 300 cagtttgcac ttgcaggttc tcttctcaga catcaatgct tatgaggtgg agcttggtac 360 tgatgaagag aagcactgct tctgccgtga gtcagacttg ttagctgtag ttgaatgaat 420 tttaccatga aaatttcgga cttacctggg aatgctccaa cggcatgaac ttatcttgcc 480 cccactttgt tgtatgccat ttgaacgttc gttaattcag cttctagatg attgttagtt 540 accepttgatt tttggtcgcc ataaactgga attatgttaa tgcccatttt ctttacagag 600 gctcttgctc acgtttggaa tacgaaactg tgctgaaccg aacttgaaat gtttacattg 660 cccatctgat gtttctgctt ctgaacattc tttaggcaac atcctaatta tt
- (2) INFORMATION FOR SEQ ID NO:173: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 794 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..794
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481800
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:173: atgcatcttc ctagtcctag ccgcagctcc tcatcttcct gcgcgcgctc cttctctgtc 60 teccatggee gagegteete cetgeteete teteetttat etecetetee atgeeggege 120 ttccctagct cgttttccca tctccctgct ccttcccatg gtgcgcaggg cgtcctcccc 180 tegacteest ceetagetee ceacegeteg cetteetete etteetagte geeegtmtee 240 agcteggtet geactegeeg teectgeece tegetgtttt tgtggeeage egagetegee 300 cagococtog cototocaco toatcaacgo cotoagocat ggatgtogaa toccototot 360 ttagtgcctt tctttgcagc ccctgcgtcg ccgtgcatgt aaggtgtttt gtctaaatgc 420 tcaagaggag tgtcgtgtcg tggacagccc ttttggcgtc gtcgggtgtt tgatgttttg 480 cgcatcccgt ctacgacacc gtcgaccctc agtgatattt cgttcttgct ttgtcgtttt 540 atcgatcgac gtctatttgc taatgtgaag tgtgtgtatg tgcctatgtg tgttgaggag 600 cgacatctgt ggaatctggg tgaagaagaa acagagcacg tccgacgctt actagctgct 660 ggtgaaagga ttgaatcggc tatcatggtc gtttagtgtc gatcgagtca accttagtcg 720 tggtaagcta ccattatttc tgctatttag ccgatgtatg agttagatgg ataaaatagt 780 tacgatgatt ttcc
- (2) INFORMATION FOR SEQ ID NO:174:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 75 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..75
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481801
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:
- Ser Phe Ser Val Ser His Gly Arg Ala Ser Ser Leu Leu Ser Pro 20 25 30
- Leu Ser Pro Ser Pro Cys Arg Phe Pro Ser Ser Phe Ser His Leu

Client Docket No. 80142.004 40 Pro Ala Pro Ser His Gly Ala Gln Gly Val Leu Pro Ser Thr Pro Ser 55 Leu Ala Pro His Arg Ser Pro Ser Ser Pro Ser 70 (2) INFORMATION FOR SEQ ID NO:175: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 75 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..75

(D) OTHER INFORMATION: / Ceres Seq. ID 1481802

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175: Met His Leu Pro Ser Pro Ser Arg Ser Ser Ser Ser Cys Ala Arg 10

Ser Phe Ser Val Ser His Gly Arg Ala Ser Ser Leu Leu Ser Pro 25

Leu Ser Pro Ser Pro Cys Arg Arg Phe Pro Ser Ser Phe Ser His Leu 40 4.5

Pro Ala Pro Ser His Gly Ala Gln Gly Val Leu Pro Ser Thr Pro Ser 55

Leu Ala Pro His Arg Ser Pro Ser Ser Pro Ser 70

- (2) INFORMATION FOR SEQ ID NO:176:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 64 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..64
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481803
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

Cys Ile Phe Leu Val Leu Ala Ala Pro His Leu Pro Ala Arg Ala 1.0

Pro Ser Leu Ser Pro Met Ala Glu Arg Pro Pro Cys Ser Ser Leu Leu 25

Tyr Leu Pro Leu His Ala Gly Ala Ser Leu Ala Arg Phe Pro Ile Ser 40 45

Leu Leu Leu Pro Met Val Arg Arg Ala Ser Ser Pro Arg Leu Pro Pro

- (2) INFORMATION FOR SEQ ID NO:177:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 239 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..239

| (D) OTHER INFORMATION: / Ceres Seq. ID 1481808                    |     |
|---|-----|
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:                         |     |
| atataaacaa gcctatgtta gcctgctacg cactgtgttc gtgcatgttt tcatttgacc | 60  |
| ttgtttccat gatgcttcga cgtgttacgc gtgctcgtgc ttcttgctgt gtcatcactg | 120 |
| gtccacattt tcttgtggaa agtgttcctt tgtacgagct tatgaaacca gtgtgcacaa | 180 |
| gcgacggacg gatttgtacc atccagnaac gnatagtgan tccgttttac taactcctg  |     |
| (2) INFORMATION FOR SEQ ID NO:178:                                |     |
| (i) SEQUENCE CHARACTERISTICS:                                     |     |
| (A) LENGTH: 76 amino acids  |     |
| (B) TYPE: amino acid  |     |
| (C) CEDANDEDNECC.   |     |

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..76
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481809
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:
- Ile Asn Lys Pro Met Leu Ala Cys Tyr Ala Leu Cys Ser Cys Met Phe 10
- Ser Phe Asp Leu Val Ser Met Met Leu Arg Arg Val Thr Arg Ala Arg 25
- Ala Ser Cys Cys Val Ile Thr Gly Pro His Phe Leu Val Glu Ser Val 40
- Pro Leu Tyr Glu Leu Met Lys Pro Val Cys Thr Ser Asp Gly Arg Ile 55
- Cys Thr Ile Gln Xaa Xaa Ile Val Xaa Pro Phe Tyr 70
- (2) INFORMATION FOR SEQ ID NO:179:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 72 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..72
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481810
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:
- Met Leu Ala Cys Tyr Ala Leu Cys Ser Cys Met Phe Ser Phe Asp Leu 10
- Val Ser Met Met Leu Arg Arg Val Thr Arg Ala Arg Ala Ser Cys Cys 25
- Val Ile Thr Gly Pro His Phe Leu Val Glu Ser Val Pro Leu Tyr Glu 40
- Leu Met Lys Pro Val Cys Thr Ser Asp Gly Arg Ile Cys Thr Ile Gln 55 60
- Xaa Xaa Ile Val Xaa Pro Phe Tyr 70
- (2) INFORMATION FOR SEQ ID NO:180:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 62 amino acids -
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..62
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481811
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

Met Phe Ser Phe Asp Leu Val Ser Met Met Leu Arg Arg Val Thr Arg

1 10 15

Ala Arg Ala Ser Cys Cys Val Ile Thr Gly Pro His Phe Leu Val Glu 20 25 30

Ser Val Pro Leu Tyr Glu Leu Met Lys Pro Val Cys Thr Ser Asp Gly 35 40 45

Arg Ile Cys Thr Ile Gln Xaa Xaa Ile Val Xaa Pro Phe Tyr 50 55 60

- (2) INFORMATION FOR SEQ ID NO:181:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 433 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..433
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481815
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

gatggaatca atttcctcga tcattttagc tgcagcaata tgaatcatga tccatcaatt 60 gctgcagaaa gtaagcaaaa caatgaagat gaacctttaa gggaaatgaa gaataaaaag 120 aagaaatgga agcaaggtac tagtagcatt gaaccaaatg acattctaga atctttccc 180 tcagagaaag ctagcttaac tggtcatttt ggtaccagca aagctattgt gccatctgtt 240 gcaaaaggaaa gcatgaacat agaaaatgag aatgtgaatg acggcaagga gaagaagaga 300 aagggcaaag ctaatatgga agtacctact gctgaaaagg acaattctaa ttgtgataat 360 caaggaattg atattagtac ccaagaatca cttaktkctt ttgtacaaaa tgaaaggrtg 420 ggtcaggaa atg

- (2) INFORMATION FOR SEQ ID NO:182:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 144 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..144
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481816
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

Asp Gly Ile Asn Phe Leu Asp His Phe Ser Cys Ser Asn Met Asn His 1 10 15

Asp Pro Ser Ile Ala Ala Glu Ser Lys Gln Asn Asn Glu Asp Glu Pro 20 25 30

Leu Arg Glu Met Lys Asn Lys Lys Lys Lys Trp Lys Gln Gly Thr Ser 35 40 45

Ser Ile Glu Pro Asn Asp Ile Leu Glu Ser Phe Pro Ser Glu Lys Ala
50 55 60

Ser Leu Thr Gly His Phe Gly Thr Ser Lys Ala Ile Val Pro Ser Val 65 70 75 80

Ala Lys Glu Ser Met Asn Ile Glu Asn Glu Asn Val Asn Asp Gly Lys
85
90
95

Glu Lys Lys Arg Lys Gly Lys Ala Asn Met Glu Val Pro Thr Ala Glu 100 105 110

Lys Asp Asn Ser Asn Cys Asp Asn Gln Gly Ile Asp Ile Ser Thr Gln 115 120 125

Glu Ser Leu Xaa Xaa Phe Val Gln Asn Glu Arg Xaa Gly Gln Glu Asn 130 135 140

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(2) INFORMATION FOR SEQ ID NO:183:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 131 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..131
          (D) OTHER INFORMATION: / Ceres Seq. ID 1481817
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:
Met Asn His Asp Pro Ser Ile Ala Ala Glu Ser Lys Gln Asn Asn Glu
                                    10
Asp Glu Pro Leu Arg Glu Met Lys Asn Lys Lys Lys Trp Lys Gln
                                25
Gly Thr Ser Ser Ile Glu Pro Asn Asp Ile Leu Glu Ser Phe Pro Ser
                            40
Glu Lys Ala Ser Leu Thr Gly His Phe Gly Thr Ser Lys Ala Ile Val
                        55
Pro Ser Val Ala Lys Glu Ser Met Asn Ile Glu Asn Glu Asn Val Asn
                                        75
Asp Gly Lys Glu Lys Lys Arg Lys Gly Lys Ala Asn Met Glu Val Pro
                                    90
Thr Ala Glu Lys Asp Asn Ser Asn Cys Asp Asn Gln Gly Ile Asp Ile
                                105
Ser Thr Gln Glu Ser Leu Xaa Xaa Phe Val Gln Asn Glu Arg Xaa Gly
       115
                            120
Gln Glu Asn
    130
(2) INFORMATION FOR SEO ID NO:184:
    (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 109 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..109
```

- (D) OTHER INFORMATION: / Ceres Seq. ID 1481818
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

Met Lys Asn Lys Lys Lys Trp Lys Gln Gly Thr Ser Ser Ile Glu

1 10 15

Pro Asn Asp Ile Leu Glu Ser Phe Pro Ser Glu Lys Ala Ser Leu Thr
20 25 30

Gly His Phe Gly Thr Ser Lys Ala Ile Val Pro Ser Val Ala Lys Glu 35 40 45

Ser Met Asn Ile Glu Asn Glu Asn Val Asn Asp Gly Lys Glu Lys Lys 50 55 60

Arg Lys Gly Lys Ala Asn Met Glu Val Pro Thr Ala Glu Lys Asp Asn 65 70 75 80

Ser Asn Cys Asp Asn Gln Gly Ile Asp Ile Ser Thr Gln Glu Ser Leu 85 90 95

Xaa Xaa Phe Val Gln Asn Glu Arg Xaa Gly Gln Glu Asn

100 105 (2) INFORMATION FOR SEQ ID NO:185:

- (i) SEQUENCE CHARACTERISTICS:
- - (A) LENGTH: 495 base pairs (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..495
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481819
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

angrggaggg ctgcggttgg ggaagagag gatagaagag aatcagggta atgcagatgg 60 gatcgatgga attcgtagcg ccggcgttgg aggagctttt gccggaactt tccctcgagg 120 agcagccacg gttgcagaac caatcccgcg agcgtgaccg catccggaag cgacgtaaca 180 agcactctcc tcctccccgt ccgtcgttga tctcggtaca gtacgtgatg gatatgggat 240 cgatgggaat ggatttcgtg gcgccggcgt tggaggagct gctgccggat ctttcccgcg 300 aggagcaget acggttgcaa aacaaatccc gcgggcgtga ccgcatctcg aagccacgta 360 acaagcacgc teetegteec egteegtege egttetegga atgggaegge aacatettea 420 aaattcccca ggtcctccac gctctcgscc actacaatgc caggcaccct ggtggcgagt 480 tcgatgttgt gaagc

- (2) INFORMATION FOR SEQ ID NO:186:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 148 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..148
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481820
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

Met Gln Met Gly Ser Met Glu Phe Val Ala Pro Ala Leu Glu Glu Leu

Leu Pro Glu Leu Ser Leu Glu Glu Gln Pro Arg Leu Gln Asn Gln Ser 20 25

Arg Glu Arg Asp Arg Ile Arg Lys Arg Arg Asn Lys His Ser Pro Pro 40

Pro Arg Pro Ser Leu Ile Ser Val Gln Tyr Val Met Asp Met Gly Ser 55

Met Gly Met Asp Phe Val Ala Pro Ala Leu Glu Glu Leu Leu Pro Asp 70 Leu Ser Arg Glu Glu Gln Leu Arg Leu Gln Asn Lys Ser Arg Gly Arg

85 90 Asp Arg Ile Ser Lys Pro Arg Asn Lys His Ala Pro Arg Pro Arg Pro

105

Ser Pro Phe Ser Glu Trp Asp Gly Asn Ile Phe Lys Ile Pro Gln Val 120 125

Leu His Ala Leu Xaa His Tyr Asn Ala Arg His Pro Gly Gly Glu Phe 135 140

Asp Val Val Lys

- (2) INFORMATION FOR SEQ ID NO:187:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 146 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..146
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481821
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:
- Met Gly Ser Met Glu Phe Val Ala Pro Ala Leu Glu Glu Leu Pro
  1 5 10 15
- Glu Leu Ser Leu Glu Glu Gln Pro Arg Leu Gln Asn Gln Ser Arg Glu 20 25 30
- Arg Asp Arg Ile Arg Lys Arg Asn Lys His Ser Pro Pro Pro Arg
  35 40 45
- Pro Ser Leu Ile Ser Val Gln Tyr Val Met Asp Met Gly Ser Met Gly 50 60
- Met Asp Phe Val Ala Pro Ala Leu Glu Glu Leu Pro Asp Leu Ser
  65 70 75 80
- Arg Glu Glu Gln Leu Arg Leu Gln Asn Lys Ser Arg Gly Arg Asp Arg
- Ile Ser Lys Pro Arg Asn Lys His Ala Pro Arg Pro Arg Pro Ser Pro
  100 105 110
- Phe Ser Glu Trp Asp Gly Asn Ile Phe Lys Ile Pro Gln Val Leu His
  115 120 125
- Ala Leu Xaa His Tyr Asn Ala Arg His Pro Gly Gly Glu Phe Asp Val 130 135 140
- Val Lys
- 145
- (2) INFORMATION FOR SEQ ID NO:188:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 143 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..143
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481822
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:
- Leu Glu Glu Gln Pro Arg Leu Gln Asn Gln Ser Arg Glu Arg Asp Arg 20 25 30
- Ile Arg Lys Arg Arg Asn Lys His Ser Pro Pro Pro Arg Pro Ser Leu
  35 40 45
- Ile Ser Val Gln Tyr Val Met Asp Met Gly Ser Met Gly Met Asp Phe
  50 55 60
  Val Ala Pro Ala Leu Glu Glu Leu Leu Pro Asp Leu Ser Arg Glu Glu
- 65 70 75 80 Gln Leu Arg Leu Gln Asp Lys Ser Arg Cly Arg Asp Arg Tlo Ser Type
- Gln Leu Arg Leu Gln Asn Lys Ser Arg Gly Arg Asp Arg Ile Ser Lys 85 90 95 Pro Arg Asn Lys His Ala Pro Arg Pro Arg Pro Ser Pro Phe Ser Glu
- 100 105 110

  Trp Asp Gly Asn Ile Phe Lys Ile Pro Gln Val Leu His Ala Leu Xaa
- His Tyr Asn Ala Arg His Pro Gly Glu Phe Asp Val Val Lys
  130 135 140
- (2) INFORMATION FOR SEQ ID NO:189:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..500
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481823
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:189: 60 aqtccccact ctcqtccccq ctcctccaa agtccaaacc ctaccacccc acttccccac 120 caccactaca tggcggcggc gctcgcctcc tcccgctact gctggagccg cccgtcgctg 180 ccgccccaac cgacccgcgg ccgccgctcc gtcactagct gcgcgctctc cggacgagag aaaagaaact cctttagctg gagagagtgt gcaatttctg ttgcattgtc agttggacta 240 atcactggtg caccaacgtt tggaccaccg gcctatgctt cttctcttga acctgttctt 300 ccagatgtgt ctgttcttat ctctggacct cccattaaag atccaggtgc tttattgaga 360 tatgctttac caatagataa taaagctatt cggtgaagtt caaaagccgc tggaggatat 420 cactgasagc ctcaaggttg stggkgttag aggcttggat tcagttgaaa gaaaatgtca 480 gasaagcatc gaaagcackg
- (2) INFORMATION FOR SEQ ID NO:190:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 131 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..131
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481824
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:
- Ser Pro His Ser Arg Pro Arg Ser Leu Gln Ser Pro Asn Pro Thr Thr 1 5 10 15
- Pro Leu Pro His His His Tyr Met Ala Ala Ala Leu Ala Ser Ser Arg 20 25 30
- Tyr Cys Trp Ser Arg Pro Ser Leu Pro Pro Gln Pro Thr Arg Gly Arg 35 40 45
- Arg Ser Val Thr Ser Cys Ala Leu Ser Gly Arg Glu Lys Arg Asn Ser 50 55 60
- Phe Ser Trp Arg Glu Cys Ala Ile Ser Val Ala Leu Ser Val Gly Leu 65 70 75 80
- Ile Thr Gly Ala Pro Thr Phe Gly Pro Pro Ala Tyr Ala Ser Ser Leu
  85 90 95
- Glu Pro Val Leu Pro Asp Val Ser Val Leu Ile Ser Gly Pro Pro Ile 100 105 110
- Lys Asp Pro Gly Ala Leu Leu Arg Tyr Ala Leu Pro Ile Asp Asn Lys
  115 120 125
- Ala Ile Arg
  - 130
- (2) INFORMATION FOR SEQ ID NO:191:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 79 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..79

(D) OTHER INFORMATION: / Ceres Seq. ID 1481825
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:
Val Pro Thr Leu Val Pro Ala Pro Ser Lys Val Gln Thr Leu Pro Pro

His Phe Pro Thr Thr Thr Trp Arg Arg Arg Ser Pro Pro Pro Ala 20 25 30

Thr Ala Gly Ala Ala Arg Arg Cys Arg Pro Asn Arg Pro Ala Ala Ala 35 40 45

Ala Pro Ser Leu Ala Ala Arg Ser Pro Asp Glu Arg Lys Glu Thr Pro 50 60

Leu Ala Gly Glu Ser Val Gln Phe Leu Leu His Cys Gln Leu Asp 65 70 75

- (2) INFORMATION FOR SEQ ID NO:192:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 108 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..108
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481826
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

Met Ala Ala Ala Leu Ala Ser Ser Arg Tyr Cys Trp Ser Arg Pro Ser 1 5 10 15 Leu Pro Pro Gln Pro Thr Arg Gly Arg Arg Ser Val Thr Ser Cys Ala

20 25 30

Leu Ser Gly Arg Glu Lys Arg Asn Ser Phe Ser Trp Arg Glu Cys Ala
35 40 45

Ile Ser Val Ala Leu Ser Val Gly Leu Ile Thr Gly Ala Pro Thr Phe 50 55 60

Gly Pro Pro Ala Tyr Ala Ser Ser Leu Glu Pro Val Leu Pro Asp Val
65 70 75 80

Ser Val Leu Ile Ser Gly Pro Pro Ile Lys Asp Pro Gly Ala Leu Leu 85 90 95

Arg Tyr Ala Leu Pro Ile Asp Asn Lys Ala Ile Arg 100 105

- (2) INFORMATION FOR SEQ ID NO:193:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 876 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..876
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481827
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

| naanncacac | tgccggcgct | ctatcttccg  | ctctctcc   | tactcqcqct | cqqcaaggcg                               | 60  |
|------------|------------|-------------|------------|------------|--|-----|
| gaaggcacac | caggctcggg | ctaccacatc  | accocatccc | ctccacctct | caccaatcac                               | 120 |
| geggegesst | caggereggg | ctacggcgcc  | acggcatete | atasasataa | +a++cc+++c                               | 180 |
| ctcgcgccat | cgcctccggt | cacaccggcc  | ggtgactetg | Ctaaaaatyy |  | 240 |
| aaatgaagac | gcctggatcc | atgatgaaga  | catcatggat | gatgttgatt | cagatgttga                               |     |
| agaatcagac | tcagaaggtg | attcaggtga  | agaagctcag | gctaagcctg | cagacaaagc                               | 300 |
| gatatacaac | aaggaggcta | ttcttqaaaa  | acttgaagac | atagcctggc | ccaagaatgt                               | 360 |
| ggactggatg | cacaaactca | ctattaaqca  | tgatcaaggg | gagaaagttg | atgtgaacga                               | 420 |
| taatattaaa | cgcgaacttg | cgttttacac  | ccaagetttg | gatggcacaa | ggcaggcctt                               | 480 |
| Lyaccucyco | cagtcgatga | agatagaatt  | cctcacacca | acadattact | acactaagat                               | 540 |
| tgagaagetg | Caylogalga | aggiccoggic | ccccagacca | acagaceace | ~~ |     |

| ggtgaagact | gatgcacaca   | tgcacaagat | caaggggagg | ttgttgtcag | agaagaagag | 600 |
|------------|--------------|------------|------------|------------|------------|-----|
| gattgaggaa | gctgaggagc   | ggaggaaggc | tagggagtcc | aggaagaaag | caaaggaggt | 660 |
| tcaggctgag | aagaagaagg   | agagggctaa | gcagaagaag | gagcagattg | agtcagtcaa | 720 |
| gaagtggaga | aagcagagac   | aacaaggggg | attcaccaag | ggaaatgatg | atgtgccaga | 780 |
| ccttaatttt | gaaggagaag   | aaggatttaa | acaatcaaag | aaaaagaggc | ccqqtqtttc | 840 |
| tcctggtgac | aggtctggtg   | gtcttgcctt | ctcttc     |            | 33 3       |     |
|            | ATION FOR SE |            |            |            |            |     |

- - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 291 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..291
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481828
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

| 1   | Ala        |     |     | 5   |     |     |            |     | 10  |     |     |            |     | 15  |     |
|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|
|     | Ala        |     | 20  |     |     |     |            | 25  |     |     |     |            | 30  |     |     |
|     | Leu        | 35  |     |     |     |     | 40         |     |     |     |     | 45         |     |     |     |
|     | Pro<br>50  |     |     |     |     | 55  |            |     |     |     | 60  |            |     |     |     |
| 65  | Ile        |     |     |     | 70  |     |            |     |     | 75  |     |            |     |     | 80  |
|     | Ser        |     |     | 85  |     |     |            |     | 90  |     |     |            |     | 95  |     |
|     | Asp        |     | 100 |     |     |     |            | 105 |     |     |     |            | 110 |     |     |
|     | Ile        | 115 |     |     |     |     | 120        |     |     |     |     | 125        |     |     |     |
|     | His<br>130 |     |     |     |     | 135 |            |     |     |     | 140 |            |     |     |     |
| 145 | Leu        |     |     |     | 150 |     |            |     |     | 155 |     |            |     |     | 160 |
|     | Lys        |     |     | 165 |     |     |            |     | 170 |     |     |            |     | 175 |     |
|     | Ala        |     | 180 |     |     |     |            | 185 |     |     |     |            | 190 |     | _   |
|     | Leu        | 195 |     |     |     |     | 200        |     |     |     |     | 205        |     |     |     |
|     | Ala<br>210 |     |     |     |     | 215 |            |     |     |     | 220 |            |     |     | _   |
| 225 | Lys        |     |     |     | 230 |     |            |     |     | 235 |     |            |     |     | 240 |
|     | Trp        |     |     | 245 |     |     |            |     | 250 |     |     |            |     | 255 |     |
|     | Val        |     | 260 |     |     |     |            | 265 |     |     |     |            | 270 |     |     |
|     | Lys        | 275 | Arg | Pro | Gly | Val | Ser<br>280 | Pro | Gly | Asp | Arg | Ser<br>285 | Gly | Gly | Leu |
| Ala | Phe        | Ser |     |     |     |     |            |     |     |     |     |            |     |     |     |

- (2) INFORMATION FOR SEQ ID NO:195:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 236 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..236
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481829
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

Met Val Phe Leu Ser Asn Glu Asp Ala Trp Ile His Asp Glu Asp Ile 1 10 15

Met Asp Asp Val Asp Ser Asp Val Glu Glu Ser Asp Ser Glu Gly Asp 20 25 30

Ser Gly Glu Glu Ala Gln Ala Lys Pro Ala Asp Lys Ala Ile Tyr Asn

Lys Glu Ala Ile Leu Glu Lys Leu Glu Asp Ile Ala Trp Pro Lys Asn
50 60

Val Asp Trp Met His Lys Leu Thr Val Glu His Asp Gln Gly Glu Lys 65 70 75 80

Val Asp Val Asn Asp Asp Leu Ala Arg Glu Leu Ala Phe Tyr Thr Gln
85 90 95

Ala Leu Asp Gly Thr Arg Gln Ala Phe Glu Lys Leu Gln Ser Met Lys

Val Arg Phe Leu Arg Pro Thr Asp Tyr Tyr Ala Glu Met Val Lys Thr

Asp Ala His Met His Lys Ile Lys Gly Arg Leu Leu Ser Glu Lys Lys

Arg Ile Glu Glu Ala Glu Glu Arg Arg Lys Ala Arg Glu Ser Arg Lys 145 150 155

Lys Ala Lys Glu Val Gln Ala Glu Lys Lys Lys Glu Arg Ala Lys Gln 165 170 175

Lys Lys Glu Gln Ile Glu Ser Val Lys Lys Trp Arg Lys Gln Arg Gln
180 185 190

Gln Gly Gly Phe Thr Lys Gly Asn Asp Asp Val Pro Asp Leu Asn Phe 195 200 205

Glu Gly Glu Glu Gly Phe Lys Gln Ser Lys Lys Lys Arg Pro Gly Val 210 215 220

Ser Pro Gly Asp Arg Ser Gly Gly Leu Ala Phe Ser 225 230 235

- (2) INFORMATION FOR SEQ ID NO:196:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 220 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..220
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481830
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

Met Asp Asp Val Asp Ser Asp Val Glu Glu Ser Asp Ser Glu Gly Asp
1 10 15

Ser Gly Glu Glu Ala Gln Ala Lys Pro Ala Asp Lys Ala Ile Tyr Asn 20 25 30

Lys Glu Ala Ile Leu Glu Lys Leu Glu Asp Ile Ala Trp Pro Lys Asn 35 40 45

Val Asp Trp Met His Lys Leu Thr Val Glu His Asp Gln Gly Glu Lys 50 55 60

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| Val<br>65  | Asp        | Val        | Asn        | Asp        | Asp<br>70  | Leu        | Ala        | Arg        | Glu        | Leu<br>75  | Ala        | Phe        | Tyr        | Thr        | Gln<br>80  |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ala        | Leu        | Asp        | Gly        | Thr<br>85  | Arg        | Gln        | Ala        | Phe        | Glu<br>90  | Lys        | Leu        | Gln        | Ser        | Met<br>95  | Lys        |
| Val        | Arg        | Phe        | Leu<br>100 | Arg        | Pro        | Thr        | Asp        | Tyr<br>105 | Tyr        | Ala        | Glu        | Met        | Val<br>110 |            | Thr        |
| Asp        | Ala        | His<br>115 | Met        | His        | Lys        | Ile        | Lys<br>120 | Gly        | Arg        | Leu        | Leu        | Ser<br>125 | Glu        | Lys        | Lys        |
| Arg        | Ile<br>130 | Glu        | Glu        | Ala        | Glu        | Glu<br>135 | Arg        | Arg        | Lys        | Ala        | Arg<br>140 |            | Ser        | Arg        | Lys        |
| Lys<br>145 | Ala        | Lys        | Glu        | Val        | Gln<br>150 | Ala        | Glu        | Lys        | Lys        | Lys<br>155 |            | Arg        | Ala        | Lys        | Gln<br>160 |
| Lys        | Lys        | Glu        | Gln        | 11e<br>165 | Glu        | Ser        | Val        | Lys        | Lys<br>170 | Trp        | Arg        | Lys        | Gln        | Arg<br>175 | Gln        |
| Gln        | Gly        | Gly        | Phe<br>180 | Thr        | Lys        | Gly        | Asn        | Asp<br>185 | Asp        | Val        | Pro        | Asp        | Leu<br>190 |            | Phe        |
| Glu        | Gly        | Glu<br>195 | Glu        | Gly        | Phe        | Lys        | Gln<br>200 |            | Lys        | Lys        | Lys        | Arg<br>205 | Pro        | Gly        | Val        |
| Ser        | Pro<br>210 | Gly        | Asp        | Arg        | Ser        | Gly<br>215 | Gly        | Leu        | Ala        | Phe        | Ser<br>220 | 203        |            |            |            |
| (2)        |            |            | OION       | FOR        | SEQ        | ID N       | 10:19      | 7:         |            |            |            |            |            |            |            |

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 530 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..530
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481831

cerecede egeegegeg cacacgeact ceaacggage egtetaege aaeggeacea 240 cegagettee eteteetgee getgeegge agecattegt categgggtt tetggaggga 300 eggegteggg gaagaegaeg gtgtgegaea tgateateea geagetgeae gaceaeegtg 360 tegtgetegt taaccaggat tegtttaee gtggeettae tgetgaagag tetgeaeaeg 420 cacaagaeta taattttgat caccetgatg catttgatae agageaactt etagaatgea 480

tggggcagct gaaatgtgct caacctgtaa atgttcctat atatgatttc

- (2) INFORMATION FOR SEQ ID NO:198:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 176 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..176
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481832
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:
- Ala Arg Leu Ala Pro Glu Thr Arg Glu Ser Ile Pro Asn Pro Asp Arg 1 5 10 15
- Pro Ala Ala Arg Glu Ala Met Pro Asp Lys Ala Val Asp Asp Val Met
  20 25 30
- Glu Ala Ala Val Gly Ala His Phe Ser Gly Leu Arg Leu Glu Ala Leu 35 40 45

Arg Leu Ser Thr Ser Ala Pro Ser Ser Pro Ser Ser Pro Ala Ala 55 Ala Ala His Thr His Ser Asn Gly Ala Val Tyr Ala Asn Gly Thr Thr 75 Glu Leu Pro Ser Pro Ala Ala Ala Arg Gln Pro Phe Val Ile Gly Val 90 Ser Gly Gly Thr Ala Ser Gly Lys Thr Thr Val Cys Asp Met Ile Ile 105 Gln Gln Leu His Asp His Arg Val Val Leu Val Asn Gln Asp Ser Phe 120 Tyr Arg Gly Leu Thr Ala Glu Glu Ser Ala His Ala Gln Asp Tyr Asn 135 Phe Asp His Pro Asp Ala Phe Asp Thr Glu Gln Leu Leu Glu Cys Met 150 155 Gly Gln Leu Lys Cys Ala Gln Pro Val Asn Val Pro Ile Tyr Asp Phe 165 170

#### (2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 154 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..154
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481833
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:
- Met Pro Asp Lys Ala Val Asp Asp Val Met Glu Ala Ala Val Gly Ala 1 10 15
- His Phe Ser Gly Leu Arg Leu Glu Ala Leu Arg Leu Ser Thr Ser Ala 20 25 30
- Pro Ser Ser Pro Ser Ser Pro Ala Ala Ala Ala His Thr His Ser 35 40 45
- Asn Gly Ala Val Tyr Ala Asn Gly Thr Thr Glu Leu Pro Ser Pro Ala 50 60
- Ala Ala Arg Gln Pro Phe Val Ile Gly Val Ser Gly Gly Thr Ala Ser 65 70 75 80
- Gly Lys Thr Thr Val Cys Asp Met Ile Ile Gln Gln Leu His Asp His 85 90 95
- Arg Val Val Leu Val Asn Gln Asp Ser Phe Tyr Arg Gly Leu Thr Ala
  100 105 110
- Glu Glu Ser Ala His Ala Gln Asp Tyr Asn Phe Asp His Pro Asp Ala 115 120 125
- Phe Asp Thr Glu Gln Leu Leu Glu Cys Met Gly Gln Leu Lys Cys Ala 130 135 140
- Gln Pro Val Asn Val Pro Ile Tyr Asp Phe 145
- (2) INFORMATION FOR SEQ ID NO:200:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 145 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..145
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481834
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:200: Met Glu Ala Ala Val Gly Ala His Phe Ser Gly Leu Arg Leu Glu Ala
- 1 5 10 15
- Leu Arg Leu Ser Thr Ser Ala Pro Ser Ser Pro Ser Ser Pro Ala 20 25 30
- Ala Ala Ala His Thr His Ser Asn Gly Ala Val Tyr Ala Asn Gly Thr 35 40 45
- Thr Glu Leu Pro Ser Pro Ala Ala Ala Arg Gln Pro Phe Val Ile Gly 50 55 60
- Val Ser Gly Gly Thr Ala Ser Gly Lys Thr Thr Val Cys Asp Met Ile 65 70 75 80
- Ile Gln Gln Leu His Asp His Arg Val Val Leu Val Asn Gln Asp Ser 85 90 95
- Phe Tyr Arg Gly Leu Thr Ala Glu Glu Ser Ala His Ala Gln Asp Tyr 100 105 110
- Asn Phe Asp His Pro Asp Ala Phe Asp Thr Glu Gln Leu Glu Cys 115 120 125
- Met Gly Gln Leu Lys Cys Ala Gln Pro Val Asn Val Pro Ile Tyr Asp 130 135 140

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- (2) INFORMATION FOR SEQ ID NO:201:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1087 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1087
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481839
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

| (,         |            | ortar ration. Di |            |            |            |      |
|------------|------------|------------------|------------|------------|------------|------|
|            |            | tccgccgtgt       |            |            |            | 60   |
| tcgatatctg | ctgtttcaga | tcataatccg       | gctcaaatcc | gtaactcagg | ttctgaaact | 120  |
| cgtccccatt | tccaaatcct | atacactcca       | ccgggaaact | cggctgactt | aactcgctct | 180  |
| cactctgaga | gacaacgcag | accttcttcg       | ccggaggctg | atcggttgat | cgtggcgatg | 240  |
| acggcggagg | agtataatta | ggaggaggag       | gatggtgcag | atctgggaag | ttgagcttgg | 300  |
| ctttatcacc | acggatctgc | ttggccgcaa       | catcataagc | catggcagct | tcctccgccg | 360  |
| tgttgaacgt | accaagccaa | actctaacac       | cttttcgtgg | atctcgaatc | tcagccgccc | 420  |
| attttcccca | tggacgctta | cgtatccctc       | tataaacatt | cttcctcttc | ctccgtttcc | 480  |
| ccggctctgt | tgcctgctcc | ttcttcactg       | cctcctctt  | cacgttaact | tcaaaatttt | 540  |
| caccggattc | cccaaagttc | aaaatttaca       | attttaaccc | cacacagata | attaaataat | 600  |
| cctgataaat | tacattacca | aaaccacaaa       | tattttttt  | ttatcatctt | ccgtaagttc | 660  |
| cagaaatatt | attttacctt | tttgctaaaa       | aggttagaaa | aaactatatg | tttgtgtttt | 720  |
| tgaatgattt | tgtatttttg | tttatgattm       | ataggagagt | acataccttg | gttggtggga | 780  |
|            |            | gaaaccccag       |            |            |            | 840  |
| gaccagagtt | cctcagccgt | gagtttacgg       | cccttggcct | tggtgacgag | aggggcataa | 900  |
| tcggaaataa | tagcaccgcc | acacattttc       | tctgtttgtt | gctgtgggtt | tctttcaaga | 960  |
| gaaagtttcc | tacggtggag | ctgaaatgcc       | tttataggcg | caaaataaat | gttttatggt | 1020 |
| aataaagtgt | gagtgaaatg | aattacttta       | tattagaata | ataattctaa | tagttttatg | 1080 |
| ttccttg    |            |                  |            |            | -          |      |
|            |            |                  |            |            |            |      |

- (2) INFORMATION FOR SEQ ID NO:202:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 86 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..86
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481840
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:
- Asn Gln Ala Asp Ser Val Ala Pro Pro Cys Tyr Arg Pro Ala Gln Gly
  1 5 10 15
- Thr Ile Pro Ser Ser Ile Ser Ala Val Ser Asp His Asn Pro Ala Gln 20 25 30
- Ile Arg Asn Ser Gly Ser Glu Thr Arg Pro His Phe Gln Ile Leu Tyr 35 40 45
- Thr Pro Pro Gly Asn Ser Ala Asp Leu Thr Arg Ser His Ser Glu Arg 50 55 60
- Gln Arg Arg Pro Ser Ser Pro Glu Ala Asp Arg Leu Ile Val Ala Met 65 70 75 80
- Thr Ala Glu Glu Tyr Asn
  - 85
- (2) INFORMATION FOR SEQ ID NO:203:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 56 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..56
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481841
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:
- Ile Lys Leu Thr Arg Leu Leu Arg Arg Val Thr Val Gln Leu Lys Glu 1 5 10 15
- Arg Phe Gln Ala Arg Tyr Leu Leu Phe Gln Ile Ile Ile Arg Leu Lys 20 25 30
- Ser Val Thr Gln Val Leu Lys Leu Val Pro Ile Ser Lys Ser Tyr Thr 35 40 45
- Leu His Arg Glu Thr Arg Leu Thr 50 55
- (2) INFORMATION FOR SEQ ID NO:204:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 101 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..101
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481842
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:
- Met Val Gln Ile Trp Glu Val Glu Leu Gly Phe Ile Thr Thr Asp Leu 1 5 10 15
- Leu Gly Arg Asn Ile Ile Ser His Gly Ser Phe Leu Arg Arg Val Glu 20 25 30
- Arg Thr Lys Pro Asn Ser Asn Thr Phe Ser Trp Ile Ser Asn Leu Ser 35 40 45
- Arg Pro Phe Ser Pro Trp Thr Leu Thr Tyr Pro Ser Ile Asn Ile Leu 50 55 60

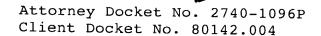


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Pro Leu Pro Pro Phe Pro Arg Leu Cys Cys Leu Leu Leu Leu His Cys 65 70 75 75 75 80

Leu Leu Phe His Val Asn Phe Lys Ile Phe Thr Gly Phe Pro Lys Val 85 90 95 95

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 1160 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1160
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481847
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:205: gaggtttctt gggaacagga tcgcttctac agatatttca cccatgtcaa gtttaacagt 60 gagaagggta tcgcgcgaag atatacaact ggttcagaat ctaattgaac gatgcctcca 120 gctttacatg aaccagaaag aagttgttga cactcttcta gaacaggcta agatcgaacc 180 tggttttaca gaactagttt ggcagaagct tgaagaagag aaccgcgaat ttttcaaggc 240 atattatctg aggctcatgg tgaagcacca gataatggaa tataacgaac tgcttgagca 300 gcagataaac cacatgcgcc agatgcatcc aactgcaggg gcttctgttc gaaacaggaa 360 tggttctcat gttccaccaa tgaatcagca acaattactc tatgaacgca aggaaccaga 420 tcaatcctct cctaatctgt caagtccata cctcaatgga ggctcagcaa ttaacacaaa 480 tataccttct tatgtggact tttcatccca ttctagaaga gttgatcctt caccaaactc 540 gctctccttg caggccacaa atatgccttt gatgcaagga atgatcaagt ctgagactgc 600 atatcaaaac tgtgctccat acatgtatgg tggtgaagca cagtccacag ttggagatgt 660 caccategea tettteagea atgatteeag caaccaatee etgaatgate etettgtega 720 tccagatgct cctacatttg gctcgttagg acaaattcct cagaacttca gcctctctga 780 totgacaget gatttttccc agagttcaga tattctggag agctacgagg gatcaccgtt 840 cctattggct gatgctgaaa atttcctgga ctctagcgaa agggtagaac atcaaggaga 900 ccacgaaaga ttgaggacca tatcatcagg cttcagttac gaaaacttcc gaagcaatta 960 ggtttattac acatggaact tcgtagtcat gcttttacgt ctgcaactac ttgcaggatt 1020 taatcccatg atcagtgtac atagatattc ttacctttcg aaagacaatt ttggggttca 1080 gggtgattac taatattatt attctcaagt gtagagaaat ttggttttta gtaataaata 1140 tttaagaacc tgttgatttt
- (2) INFORMATION FOR SEQ ID NO:206:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 319 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..319
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481848
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

Arg Phe Leu Gly Asn Arg Ile Ala Ser Thr Asp Ile Ser Pro Met Ser leu Thr Val Arg Arg Val Ser Arg Glu Asp Ile Gln Leu Val Gln

20 25 30
Asn Leu Ile Glu Arg Cys Leu Gln Leu Tyr Met Acn Cln Lys Clu yel

Asn Leu Ile Glu Arg Cys Leu Gln Leu Tyr Met Asn Gln Lys Glu Val 35 40 45

Val Asp Thr Leu Leu Glu Gln Ala Lys Ile Glu Pro Gly Phe Thr Glu
50 55 60
Leu Val Trp Gln Lys Leu Glu Glu Glu Asn Arg Glu Phe Phe Lys Ala

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| 65  |            |            |            |            | 70         |            |            |            |            | 75         |            |            |            |            | 80         |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Tyr   | Tyr        | Leu        | Arg        | Leu<br>85  | Met        | Val        | Lys        | His        | Gln<br>90  | Ile        | Met        | Glu        | Tyr        | Asn<br>95  | Glu        |
| Leu   | Leu        | Glu        | Gln<br>100 | Gln        | Ile        | Asn        | His        | Met<br>105 | Arg        | Gln        | Met        | His        | Pro<br>110 | Thr        | Ala        |
| Gly   | Ala        | Ser<br>115 | Val        | Arg        | Asn        | Arg        | Asn<br>120 | Gly        | Ser        | His        | Val        | Pro<br>125 | Pro        | Met        | Asn        |
| Gln   | Gln<br>130 | Gln        | Leu        | Leu        | Tyr        | Glu<br>135 | Arg        | Lys        | Glu        | Pro        | Asp<br>140 | Gln        | Ser        | Ser        | Pro        |
| Asn<br>145  | Leu        | Ser        | Ser        | Pro        | Tyr<br>150 | Leu        | Asn        | Gly        | Gly        | Ser<br>155 | Ala        | Ile        | Asn        | Thr        | Asn<br>160 |
| Ile   | Pro        | Ser        | Tyr        | Val<br>165 | Asp        | Phe        | Ser        | Ser        | His<br>170 | Ser        | Arg        | Arg        | Val        | Asp<br>175 | Pro        |
| Ser   | Pro        | Asn        | Ser<br>180 | Leu        | Ser        | Leu        | Gln        | Ala<br>185 | Thr        | Asn        | Met        | Pro        | Leu<br>190 | Met        | Gln        |
| Gly   | Met        | Ile<br>195 | Lys        | Ser        | Glu        | Thr        | Ala<br>200 | Tyr        | Gln        | Asn        | Cys        | Ala<br>205 | Pro        | Tyr        | Met        |
| Tyr   | Gly<br>210 | Gly        | Glu        | Ala        | Gln        | Ser<br>215 | Thr        | Val        | Gly        | Asp        | Val<br>220 | Thr        | Ile        | Ala        | Ser        |
| 225   | Ser        |            |            |            | 230        |            |            |            |            | 235        |            |            |            |            | 240        |
| Pro   | Asp        | Ala        | Pro        | Thr<br>245 | Phe        | Gly        | Ser        | Leu        | Gly<br>250 | Gln        | Ile        | Pro        | Gln        | Asn<br>255 | Phe        |
| Ser   | Leu        | Ser        | Asp<br>260 | Leu        | Thr        | Ala        | Asp        | Phe<br>265 | Ser        | Gln        | Ser        | Ser        | Asp<br>270 | Ile        | Leu        |
| Glu   | Ser        | Tyr<br>275 | Glu        | Gly        | Ser        | Pro        | Phe<br>280 | Leu        | Leu        | Ala        | Asp        | Ala<br>285 | Glu        | Asn        | Phe        |
| Leu   | Asp<br>290 | Ser        | Ser        | Glu        | Arg        | Val<br>295 | Glu        | His        | Gln        | Gly        | Asp<br>300 | His        | Glu        | Arg        | Leu        |
| Arg Thr Ile Ser Ser Gly Phe Ser Tyr Glu Asn Phe Arg Ser Asn 305 310 315 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
| (2)   |            | ORMAT      |            |            |            |            |            |            |            |            |            |            |            |            |            |
|   | ( - )      |            |            |            | 1: 30      |            |            |            | ls         |            |            |            |            |            |            |

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..305
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481849
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

Met Ser Ser Leu Thr Val Arg Arg Val Ser Arg Glu Asp Ile Gln Leu 10

Val Gln Asn Leu Ile Glu Arg Cys Leu Gln Leu Tyr Met Asn Gln Lys 20 25

Glu Val Val Asp Thr Leu Leu Glu Gln Ala Lys Ile Glu Pro Gly Phe 40

Thr Glu Leu Val Trp Gln Lys Leu Glu Glu Glu Asn Arg Glu Phe Phe 55

Lys Ala Tyr Tyr Leu Arg Leu Met Val Lys His Gln Ile Met Glu Tyr 70 75

Asn Glu Leu Leu Glu Gln Gln Ile Asn His Met Arg Gln Met His Pro 85 90

Thr Ala Gly Ala Ser Val Arg Asn Arg Asn Gly Ser His Val Pro Pro 105

Met Asn Gln Gln Leu Leu Tyr Glu Arg Lys Glu Pro Asp Gln Ser 115 120

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|            |            |            | CAC        | - 110      |              | 0172       | 00         | -1         |            |            |            |            |            |            | Р          |
|------------|------------|------------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Ser        | Pro        | Asn        | Leu        | Ser        | Ser          | Pro        | Tyr        | Leu        | Asn        | Gly        | Gly<br>140 | Ser        | Ala        | Ile        | Asn        |
| Thr<br>145 | Asn        | Ile        | Pro        | Ser        | Tyr<br>150   | Val        | Asp        | Phe        | Ser        | Ser<br>155 |            | Ser        | Arg        | Arg        | Val<br>160 |
| Asp        | Pro        | Ser        | Pro        | Asn<br>165 | Ser          | Leu        | Ser        | Leu        | Gln<br>170 |            | Thr        | Asn        | Met        | Pro<br>175 | Leu        |
| Met        | Gln        | Gly        | Met<br>180 | Ile        | Lys          | Ser        | Glu        | Thr<br>185 |            | Tyr        | Gln        | Asn        | Cys<br>190 | Ala        | Pro        |
| Tyr        | Met        | Tyr<br>195 | Gly        | Gly        | Glu          | Ala        | Gln<br>200 | Ser        | Thr        | Val        | Gly        | Asp<br>205 |            | Thr        | Ile        |
| Ala        | Ser<br>210 | Phe        | Ser        | Asn        | Asp          | Ser<br>215 | Ser        | Asn        | Gln        | Ser        | Leu<br>220 |            | Asp        | Pro        | Leu        |
| Val<br>225 | Asp        | Pro        | Asp        | Ala        | Pro<br>230   | Thr        | Phe        | Gly        | Ser        | Leu<br>235 |            | Gln        | Ile        | Pro        | Gln<br>240 |
| Asn        | Phe        | Ser        | Leu        | Ser<br>245 |              | Leu        | Thr        | Ala        | Asp<br>250 |            | Ser        | Gln        | Ser        | Ser<br>255 | Asp        |
| Ile        | Leu        | Glu        | Ser<br>260 | Tyr        | Glu          | Gly        | Ser        | Pro<br>265 | Phe        | Leu        | Leu        | Ala        | Asp<br>270 | Ala        | Glu        |
| Asn        | Phe        | Leu<br>275 | Asp        | Ser        | Ser          | Glu        | Arg<br>280 | Val        | Glu        | His        | Gln        | Gly<br>285 |            | His        | Glu        |
| Arg        | Leu<br>290 | Arg        | Thr        | Ile        | Ser          | Ser<br>295 | Gly        | Phe        | Ser        | Tyr        | Glu<br>300 | Asn        | Phe        | Arg        | Ser        |
| Asn<br>305 |            |            |            |            |              |            |            |            |            |            |            |            |            |            |            |
| (2)        |            |            |            |            | SEQ<br>HARAC |            |            |            |            |            |            |            |            |            |            |
|            |            |            |            |            | I: 27        |            |            | acid       | ls         |            |            |            |            |            |            |
|            |            |            |            |            | amin<br>EDNE |            | :1d        |            |            |            |            |            |            |            |            |
|            |            | ( E        | ) TC       | POLC       | GY:          | line       |            |            |            |            |            |            |            |            |            |
|            |            |            |            |            | PE:          | pept       | ide        |            |            |            |            |            |            |            |            |
|            | ( TX )     |            | TURE       |            | EY:          | nent       | ide        |            |            |            |            |            |            |            |            |
|            |            |            |            |            | ON:          |            |            |            |            |            |            |            |            |            |            |
|            |            | (C         | ro (       | HER        | INFO         | RMAT       | ION:       | / C        | eres       | Seg        | . ID       | 148        | 1850       | )          |            |
| M-+        | (Xi)       | SEC        | UENC       | E DE       | SCRI         | PTIO       | N: S       | EQ I       | D NO       | :208       | :          |            |            |            |            |
| 1          | Asn        |            |            | 5          |              |            |            |            | 10         |            |            |            |            | 15         |            |
| Glu        | Pro        | Gly        | Phe<br>20  | Thr        | Glu          | Leu        | Val        | Trp<br>25  | Gln        | Lys        | Leu        | Glu        | Glu<br>30  | Glu        | Asn        |
| Arg        | Glu        | Phe<br>35  | Phe        | Lys        | Ala          | Tyr        | Tyr<br>40  | Leu        | Arg        | Leu        | Met        | Val<br>45  |            | His        | Gln        |
|            |            |            |            |            | _            |            |            |            |            |            |            |            |            |            |            |

Ile Met Glu Tyr Asn Glu Leu Leu Glu Gln Gln Ile Asn His Met Arg 55 Gln Met His Pro Thr Ala Gly Ala Ser Val Arg Asn Arg Asn Gly Ser 70 75 His Val Pro Pro Met Asn Gln Gln Leu Leu Tyr Glu Arg Lys Glu 85 90 Pro Asp Gln Ser Ser Pro Asn Leu Ser Ser Pro Tyr Leu Asn Gly Gly 100 105 Ser Ala Ile Asn Thr Asn Ile Pro Ser Tyr Val Asp Phe Ser Ser His 115 120 Ser Arg Arg Val Asp Pro Ser Pro Asn Ser Leu Ser Leu Gln Ala Thr 135 Asn Met Pro Leu Met Gln Gly Met Ile Lys Ser Glu Thr Ala Tyr Gln 150 155 Asn Cys Ala Pro Tyr Met Tyr Gly Glu Ala Gln Ser Thr Val Gly 165 170 Asp Val Thr Ile Ala Ser Phe Ser Asn Asp Ser Ser Asn Gln Ser Leu

|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Asp |     | Leu | Val | Asp | Pro | -   | Ala | Pro | Thr | Phe | _   | Ser | Leu | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gln | Ile | Pro | Gln | Asn | Phe | Ser | Leu | Ser | Asp | Leu | Thr | Ala | Asp | Phe | Ser |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Gln | Ser | Ser | Asp | Ile | Leu | Glu | Ser | Tyr | Glu | Gly | Ser | Pro | Phe | Leu | Leu |
| 225 |     |     | _   |     | 230 |     |     | _   |     | 235 |     |     |     |     | 240 |
| Ala | Asp | Ala | Glu | Asn | Phe | Leu | Asp | Ser | Ser | Glu | Arg | Val | Glu | His | Gln |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Gly | Asp | His | Glu | Arg | Leu | Arg | Thr | Ile | Ser | Ser | Gly | Phe | Ser | Tyr | Glu |
|     | -   |     | 260 | •   |     | _   |     | 265 |     |     |     |     | 270 |     |     |
| Asn | Phe | Arg | Ser | Asn |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 275 |     |     |     |     |     |     |     |     |     |     |     |     |     |

- (2) INFORMATION FOR SEQ ID NO:209:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 806 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..806
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481851
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:209: cagcttaaca cttgatgagg ttcaaaatca cttggggagt tctggtaaag ctctgggaag 60 120 tatggctgtc aatggtggag cagctgctca ggagggtctt tctcgccagg ggagtttgac 180 tttgcctcgg gatctcagca aaaagactgt tgatgaggtt tggaaagaca ttcagcagaa 240 taagaatgga ggtagtgctc atgagaggag ggataagcag cctacacttg gggaaatgac 300 gcttgaagac ctgttgttga aagcaggagt ggtcactgag actatccctg gttcgaacca 360 420 tgatggtcct gttggtggtg gtagtgctgg ttcaggtgct ggtttagggc aaaacattac tcaagttggc ccatggattc aatatcatca gctcccatca atgccacagc ctcaagcatt 480 tatgccctat ccggtttcag atatgcaagc aatggtgtct cagtcttctt tgatgggtgg 540 tttqtcaqat acacaaactc ctqqaaqqaa qaqqqtaqct tcaqqaqaaq ttqtaqaqaa 600 gactgtgaca ccattgcttg catagctgca acaggtaaag gtccactcaa caattgggct 660 actcacctca qtgatccact ccacaccacc atcatcgata ccttctcctc atcttaaaat 720 cattatcatg tgagattcta tttgtaactt atgtaaaaac agagctatga tgatactgaa 780 tcqactttqq qcttttqctt gtttgg
- (2) INFORMATION FOR SEQ ID NO:210:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 207 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..207
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481852
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

Ser Leu Thr Leu Asp Glu Val Gln Asn His Leu Gly Ser Ser Gly Lys

1 10 15

Ala Leu Gly Ser Met Asn Leu Asp Glu Leu Leu Lys Ser Val Cys Ser 20 25 30

Val Glu Ala Asn Gln Pro Ser Ser Met Ala Val Asn Gly Gly Ala Ala 35 40 45

Ala Gln Glu Gly Leu Ser Arg Gln Gly Ser Leu Thr Leu Pro Arg Asp 50 55 60

Leu Ser Lys Lys Thr Val Asp Glu Val Trp Lys Asp Ile Gln Gln Asn 75 Lys Asn Gly Gly Ser Ala His Glu Arg Arg Asp Lys Gln Pro Thr Leu 85 90 Gly Glu Met Thr Leu Glu Asp Leu Leu Leu Lys Ala Gly Val Val Thr 100 105 Glu Thr Ile Pro Gly Ser Asn His Asp Gly Pro Val Gly Gly Ser 120 Ala Gly Ser Gly Ala Gly Leu Gly Gln Asn Ile Thr Gln Val Gly Pro 135 Trp Ile Gln Tyr His Gln Leu Pro Ser Met Pro Gln Pro Gln Ala Phe 150 155 Met Pro Tyr Pro Val Ser Asp Met Gln Ala Met Val Ser Gln Ser Ser 170 Leu Met Gly Gly Leu Ser Asp Thr Gln Thr Pro Gly Arg Lys Arg Val 185 Ala Ser Gly Glu Val Val Glu Lys Thr Val Thr Pro Leu Leu Ala 195 200 (2) INFORMATION FOR SEQ ID NO:211:

- - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 187 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..187
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481853
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

Met Asn Leu Asp Glu Leu Leu Lys Ser Val Cys Ser Val Glu Ala Asn 5 10

Gln Pro Ser Ser Met Ala Val Asn Gly Gly Ala Ala Ala Gln Glu Gly 25

Leu Ser Arg Gln Gly Ser Leu Thr Leu Pro Arg Asp Leu Ser Lys Lys 40

Thr Val Asp Glu Val Trp Lys Asp Ile Gln Gln Asn Lys Asn Gly Gly

Ser Ala His Glu Arg Arg Asp Lys Gln Pro Thr Leu Gly Glu Met Thr 70 75

Leu Glu Asp Leu Leu Lys Ala Gly Val Val Thr Glu Thr Ile Pro 90

Gly Ser Asn His Asp Gly Pro Val Gly Gly Ser Ala Gly Ser Gly 105 Ala Gly Leu Gly Gln Asn Ile Thr Gln Val Gly Pro Trp Ile Gln Tyr

120 125 His Gln Leu Pro Ser Met Pro Gln Pro Gln Ala Phe Met Pro Tyr Pro 135 140

Val Ser Asp Met Gln Ala Met Val Ser Gln Ser Ser Leu Met Gly Gly 155 150

Leu Ser Asp Thr Gln Thr Pro Gly Arg Lys Arg Val Ala Ser Gly Glu 165 170

- Val Val Glu Lys Thr Val Thr Pro Leu Leu Ala 180
- (2) INFORMATION FOR SEQ ID NO:212:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 167 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..167
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481854
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:
- Met Ala Val Asn Gly Gly Ala Ala Ala Gln Glu Gly Leu Ser Arg Gln  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$
- Gly Ser Leu Thr Leu Pro Arg Asp Leu Ser Lys Lys Thr Val Asp Glu 20 25 30
- Val Trp Lys Asp Ile Gln Gln Asn Lys Asn Gly Gly Ser Ala His Glu 35 40 45
- Arg Arg Asp Lys Gln Pro Thr Leu Gly Glu Met Thr Leu Glu Asp Leu 50 60
- Leu Leu Lys Ala Gly Val Val Thr Glu Thr Ile Pro Gly Ser Asn His 65 70 75 80
- Asp Gly Pro Val Gly Gly Gly Ser Ala Gly Ser Gly Ala Gly Leu Gly
  85 90 95
- Gln Asn Ile Thr Gln Val Gly Pro Trp Ile Gln Tyr His Gln Leu Pro 100 105 110
- Ser Met Pro Gln Pro Gln Ala Phe Met Pro Tyr Pro Val Ser Asp Met
  115 120 125
- Gln Ala Met Val Ser Gln Ser Ser Leu Met Gly Gly Leu Ser Asp Thr 130 135 140
- Gln Thr Pro Gly Arg Lys Arg Val Ala Ser Gly Glu Val Val Glu Lys 145 150 155 160
- Thr Val Thr Pro Leu Leu Ala

165

- (2) INFORMATION FOR SEQ ID NO:213:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 391 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..391
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481859
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:
- acatatgctg teegteaceg egegeete ettgeeette tteaceett eeteceggae 60 ceggegtete egtgeeegtg egtreettet eeggeetgeg gteteetea eeggeeaceg 120 ctgeetega attgggeaag geaateagae egeteeeate aacegeeetg acegegegag 180 gaagateaaa egeggaggee gteegteet eegegttat egtgatgeea ggeetegeeg 240 cageegagaa egtegeetge eegetgeegeegtege eegsgetete aacegeeget teacegacat egtegeactg etetteagee acaagggege tggateget ggegemgteg 360 eggggttege mategeegte gtgtteget g
- (2) INFORMATION FOR SEQ ID NO:214:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 130 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..130
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481860

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214: His Met Leu Ser Val Thr Ala Arg Ala Ser Leu Pro Phe Phe Thr Leu 5 10 Ser Ser Arg Thr Arg Arg Leu Arg Ala Arg Ala Xaa Leu Leu Arg Pro 25 Ala Val Ser Ser Thr Gly His Arg Cys Leu Ala Ile Gly Gln Gly Asn Gln Thr Ala Pro Ile Asn Arg Pro Asp Arg Ala Arg Lys Ile Lys Arg Gly Gly Arg Pro Ser Leu Pro Arg Tyr Arg Asp Ala Arg Pro Arg Arg Ser Arg Ala Gly Arg Arg Leu Ala Gly Ala Ala Arg Arg Pro Xaa Ser 90 Gln Pro Pro Leu His Arg His Arg Arg Thr Ala Leu Gln Pro Gln Gly 105 Arg Trp Ile Ala Arg Arg Xaa Arg Gly Val Arg Xaa Arg Arg Arg Val 120 Arg Val 130

- (2) INFORMATION FOR SEQ ID NO:215:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 129 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..129
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481861
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:
- Ile Cys Cys Pro Ser Pro Arg Ala Pro Pro Cys Pro Ser Ser Pro Phe 10 Pro Pro Gly Pro Gly Val Ser Val Pro Val Arg Xaa Phe Ser Gly Leu

25

Arg Ser Pro Pro Pro Ala Thr Ala Ala Ser Gln Leu Gly Lys Ala Ile 40

Arg Pro Leu Pro Ser Thr Ala Leu Thr Ala Arg Gly Arg Ser Asn Ala 55

Glu Ala Val Arg Pro Ser Arg Val Ile Val Met Pro Gly Leu Ala Ala 70 75

Ala Glu Gln Asp Ala Val Ser Leu Val Arg Arg Val Ala Xaa Ala Leu 85 90

Asn Arg Arg Phe Thr Asp Ile Val Ala Leu Leu Phe Ser His Lys Gly 100 105

Ala Gly Ser Leu Gly Xaa Val Ala Gly Phe Xaa Ile Ala Val Val Phe 115 120

Ala

- (2) INFORMATION FOR SEQ ID NO:216:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 129 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..129

(D) OTHER INFORMATION: / Ceres Seq. ID 1481862 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:216: Met Leu Ser Val Thr Ala Arg Ala Ser Leu Pro Phe Phe Thr Leu Ser 1.0 Ser Arg Thr Arg Arg Leu Arg Ala Arg Ala Xaa Leu Leu Arg Pro Ala 25 Val Ser Ser Thr Gly His Arg Cys Leu Ala Ile Gly Gln Gly Asn Gln 40 Thr Ala Pro Ile Asn Arg Pro Asp Arg Ala Arg Lys Ile Lys Arg Gly 55 Gly Arg Pro Ser Leu Pro Arg Tyr Arg Asp Ala Arg Pro Arg Arg Ser 70 75 Arg Ala Gly Arg Arg Leu Ala Gly Ala Ala Arg Arg Pro Xaa Ser Gln 90 Pro Pro Leu His Arg His Arg Arg Thr Ala Leu Gln Pro Gln Gly Arg 105 Trp Ile Ala Arg Arg Xaa Arg Gly Val Arg Xaa Arg Arg Arg Val Arg 115 120 Val

- (2) INFORMATION FOR SEQ ID NO:217:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 589 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..589
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481863
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:217: agcagccgct cccgactttt accttcctac ctggtgctgt agcatccgcc gcctcccgca 60 gaacccgaag atggcgtcgt cggcgtcgac cctcgaaatc gaggcccgcg acgtggttaa 120 gatagtgctg cagttctgca aggagaattc gctgcagcag acgttccaga cgctgcaaaa 180 cgagtgccag gtctccctca acactgttga cagcatcgac accttcattg ccgacatcaa 240 cgccgggcgt tgggatgctg tgcttcccca ggtcgcacag ctcaagctgc cacgcaagaa 300 gctcgaggac ctctatgagc agattgtgtt ggagatggct gagctccgtg agcttgacac 360 ggcccgtgcc atcctccgcc agacgcaggt catgggtgtt atgaagcagg agcagcctga 420 reggtacete egeettgage accteettgt eegeacatae tittgaceeca atgaggeeta 480 ccaagaatcb accaaggaga agcggcgagc actgattgct caagctgttg ctttcagaag 540 tctcagtagt acsgccatct cgtcttatgg cactgattgg tcaggcttg
- (2) INFORMATION FOR SEQ ID NO:218:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 196 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..196
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481864
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:
- Ala Ala Pro Asp Phe Tyr Leu Pro Thr Trp Cys Cys Ser Ile Arg
  1 10 15
- Arg Leu Pro Gln Asn Pro Lys Met Ala Ser Ser Ala Ser Thr Leu Glu 20 25 30
- Ile Glu Ala Arg Asp Val Val Lys Ile Val Leu Gln Phe Cys Lys Glu

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40 Asn Ser Leu Gln Gln Thr Phe Gln Thr Leu Gln Asn Glu Cys Gln Val 55 Ser Leu Asn Thr Val Asp Ser Ile Asp Thr Phe Ile Ala Asp Ile Asn Ala Gly Arg Trp Asp Ala Val Leu Pro Gln Val Ala Gln Leu Lys Leu 90 Pro Arg Lys Leu Glu Asp Leu Tyr Glu Gln Ile Val Leu Glu Met 105 100 Ala Glu Leu Arg Glu Leu Asp Thr Ala Arg Ala Ile Leu Arg Gln Thr 120 Gln Val Met Gly Val Met Lys Gln Glu Gln Pro Xaa Arg Tyr Leu Arg 140 135 Leu Glu His Leu Leu Val Arg Thr Tyr Phe Asp Pro Asn Glu Ala Tyr 150 155 Gln Glu Xaa Thr Lys Glu Lys Arg Arg Ala Leu Ile Ala Gln Ala Val 170 165 Ala Phe Arg Ser Leu Ser Ser Xaa Ala Ile Ser Ser Tyr Gly Thr Asp 180 185 Trp Ser Gly Leu 195

- (2) INFORMATION FOR SEQ ID NO:219:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 173 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..173
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481865
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:
- Met Ala Ser Ser Ala Ser Thr Leu Glu Ile Glu Ala Arg Asp Val Val 10 5
- Lys Ile Val Leu Gln Phe Cys Lys Glu Asn Ser Leu Gln Gln Thr Phe 25
- Gln Thr Leu Gln Asn Glu Cys Gln Val Ser Leu Asn Thr Val Asp Ser 40
- Ile Asp Thr Phe Ile Ala Asp Ile Asn Ala Gly Arg Trp Asp Ala Val 55
- Leu Pro Gln Val Ala Gln Leu Lys Leu Pro Arg Lys Leu Glu Asp 70
- Leu Tyr Glu Gln Ile Val Leu Glu Met Ala Glu Leu Arg Glu Leu Asp 85 Thr Ala Arg Ala Ile Leu Arg Gln Thr Gln Val Met Gly Val Met Lys
- 105 100 Gln Glu Gln Pro Xaa Arg Tyr Leu Arg Leu Glu His Leu Leu Val Arg
- 125 120 Thr Tyr Phe Asp Pro Asn Glu Ala Tyr Gln Glu Xaa Thr Lys Glu Lys 140 135
- Arg Arg Ala Leu Ile Ala Gln Ala Val Ala Phe Arg Ser Leu Ser Ser 150 155
- Xaa Ala Ile Ser Ser Tyr Gly Thr Asp Trp Ser Gly Leu 170 165
- (2) INFORMATION FOR SEQ ID NO:220:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 554 base pairs
    - (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..554
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481873
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

60 agaatttgat ttgcaaaaac aaactaagtg gtggcaaaga gcgatccaaa tatgccaaat tataqtcaaa aacaatttqq tcttcaattq cattqatttt gcacttcttq tqttqctttt 120 tgatgtgttg gcataaatca ccaaaaaggg ggagattata aggcaaatgt gcccttgggc 180 catttctaaa atgttttggt gattaagtgc ccaacacgtt tgaataagtt cttatgggcc 240 aaataaagtg agaagtgaaa atcaaggcac aatgtatgtt tctagactta gtacatcgtt 300 ttttgaaggc taatgtgttt tctctaagtg cttgaaacag tgataaaaga gaagaaaagg 360 420 attgcaaaag agttggctat gtgcagcaaa ctccagttcg gcttggcaca ccgaactgtc cggtggtgca ccggactgtc cggtgcgcca rgctggtctc cggtgaaatg gccactctcg 480 ggactcaaca acgcgtatgg ctaaaaatca ccggaccgtc cggtgagtca tctacgacga 540 actcattqct ctcq

- (2) INFORMATION FOR SEQ ID NO:221:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 44 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..44
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481874
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

Glu Phe Asp Leu Gln Lys Gln Thr Lys Trp Trp Gln Arg Ala Ile Gln 1 5 10 15

Ile Cys Gln Ile Ile Val Lys Asn Asn Leu Val Phe Asn Cys Ile Asp 20 25 30

Phe Ala Leu Leu Val Leu Leu Phe Asp Val Leu Ala 35 40

- (2) INFORMATION FOR SEQ ID NO:222:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 41 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..41
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481875
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

Met Cys Ser Lys Leu Gln Phe Gly Leu Ala His Arg Thr Val Arg Trp  $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ 

Cys Thr Gly Leu Ser Gly Ala Pro Xaa Trp Ser Pro Val Lys Trp Pro

Leu Ser Gly Leu Asn Asn Ala Tyr Gly
35 40

- (2) INFORMATION FOR SEQ ID NO:223:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 478 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..478
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481885
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

gcattgcact mnngggagcg tgcgcrgtag gagtggatcg gaggagcatg trgaggctaa 60 agattggava aggaggaggg ccatggatgc agacggcgag cgacttccat ggccggcagg 120 ttrggagta cgacccggac gccggcaccg acgaggagcg cacaaggtgg agcagcttcg 180 ccgggcgttc acagagaacc gcttccgaag agggaatcgc aggacctcct aatgcgtatg cagttcgctg gacaaaaata tgtrcatgcv gatctdcctg crgccaccaa gatagangag 300 gatggcgacg aggtgccgct gacggaggag aggttgamgg aatcgctgar gcgagcdctg 360 ggttrcatgg ctgctctca agctgaagat ggccactggc cgcctggtga ttacagtvgg 420 gttatgtacc tcatgccgtt ctggatttc gcactgcaca tcacaggcac ggtcgatg

- (2) INFORMATION FOR SEQ ID NO:224:
  - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 127 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..127
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481886
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:
- Ile Ala Xaa Xaa Gly Ala Cys Xaa Val Gly Val Asp Arg Arg Ser Met
  1 5 10 15
- Xaa Arg Leu Lys Ile Gly Xaa Gly Gly Gly Pro Trp Met Gln Thr Ala
  20 25 30
- Ser Asp Phe His Gly Arg Gln Val Xaa Glu Tyr Asp Pro Asp Ala Gly 35 40 45
- Thr Asp Glu Glu Arg Thr Arg Trp Ser Ser Phe Ala Gly Arg Ser Gln 50 55 60
- Arg Thr Ala Ser Glu Glu Gly Ile Ala Gly Pro Pro Asn Ala Tyr Ala 65 70 75 80
- Val Arg Trp Thr Lys Ile Cys Xaa Cys Xaa Ser Xaa Cys Xaa His Gln 85 90 95
- Asp Arg Xaa Gly Trp Arg Arg Gly Ala Ala Asp Gly Glu Val Xaa
  100 105 110
- Gly Ile Ala Xaa Ala Ser Xaa Gly Xaa His Gly Cys Ser Pro Ser 115 120 125
- (2) INFORMATION FOR SEQ ID NO:225:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 112 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..112
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481887
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:
- Met Xaa Arg Leu Lys Ile Gly Xaa Gly Gly Gly Pro Trp Met Gln Thr 1  $\phantom{\bigg|}$  5  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15
- Ala Ser Asp Phe His Gly Arg Gln Val Xaa Glu Tyr Asp Pro Asp Ala

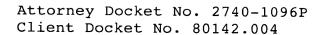


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| Gly       | Thr       | Asp<br>35 | Glu        | Glu       | Arg       | Thr | Arg<br>40 | Trp        | Ser       | Ser       | Phe | Ala<br>45 | Gly        | Arg       | Ser       |
|-----------|-----------|-----------|------------|-----------|-----------|-----|-----------|------------|-----------|-----------|-----|-----------|------------|-----------|-----------|
|           | Arg<br>50 |           |            |           |           | 55  |           |            |           |           | 60  |           |            |           | _         |
| Ala<br>65 | Val       | Arg       | Trp        | Thr       | Lys<br>70 | Ile | Cys       | Xaa        | Cys       | Xaa<br>75 | Ser | Xaa       | Cys        | Xaa       | His<br>80 |
| Gln       | Asp       | Arg       | Xaa        | Gly<br>85 | Trp       | Arg | Arg       | Gly        | Ala<br>90 | Ala       | Asp | Gly       | Gly        | Glu<br>95 | Val       |
| Xaa       | Gly       | Ile       | Ala<br>100 | Xaa       | Ala       | Ser | Xaa       | Gly<br>105 | Xaa       | His       | Gly | Cys       | Ser<br>110 | Pro       | Ser       |

- (2) INFORMATION FOR SEQ ID NO:226:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 123 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..123
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481888
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:
- Met Ala Gly Arg Phe Xaa Ser Thr Thr Arg Thr Pro Ala Pro Thr Arg 1 5 10 15
- Ser Ala Gln Gly Gly Ala Ala Ser Pro Gly Val His Arg Glu Pro Leu 20 25 30
- Pro Lys Arg Glu Ser Gln Asp Leu Leu Met Arg Met Gln Phe Ala Gly 35 40 45
- Gln Lys Tyr Xaa His Xaa Asp Xaa Pro Xaa Ala Thr Lys Ile Xaa Glu 50 60
- Asp Gly Asp Glu Val Pro Leu Thr Glu Glu Arg Leu Xaa Glu Ser Leu 65 70 75 80
- Xaa Arg Xaa Leu Gly Xaa Met Ala Ala Leu Gln Ala Glu Asp Gly His 85 90 95 Trp Pro Pro Gly Asp Tyr Ser Xaa Val Met Tyr Leu Met Pro Phe Trp
- 100 105
  Ile Phe Ala Leu His Ile Thr Gly Thr Val Asp
  115 120
- (2) INFORMATION FOR SEQ ID NO:227:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 545 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..545
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481893
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

| atagccttar | cccggcgcga | gaagaaatcg | tatcctcgcc | agctcttcac | caacagattc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gtctcctcgc | ctccgccggg | tttcgaccag | aacgccgccg | ccagcccacc | agtaattcct | 120 |
| ccgggcactg | gtctccacct | cctctgggat | caccacccaa | gaaaagggtg | cqcqqcqcat | 180 |
| aggcgaccac | tgagatttta | ttctctatat | aacatttggc | tgtaagtgga | ttataatctc | 240 |
| tataactctt | aaataagtgc | aaatatctca | atgtcaagtg | tttcaaattc | tattqctqtq | 300 |
| ggtcttccaa | gctatgggct | atatctagag | acaaggtttc | tcacqcaqac | ctataggaac | 360 |
| ttcgcacaga | aatcctctta | caagtattcc | agaatccgtg | caqtqcaqqq | aaatggtggg | 420 |





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cgtcgaaggc tggttgacat aatccgaatc attccagaac tctcaaggga ctattttaaa 480 agtcgatcga ggcgagctct ttttggtggc atctcgttgc ttggcggctt ttacgttgca 540 cagac

- (2) INFORMATION FOR SEQ ID NO:228:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 74 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..74
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481894
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

Ile Ala Leu Xaa Arg Arg Glu Lys Lys Ser Tyr Pro Arg Gln Leu Phe
1 5 10 15

Thr Asn Arg Phe Val Ser Ser Pro Pro Pro Gly Phe Asp Gln Asn Ala 20 25 30

Ala Ala Ser Pro Pro Val Ile Pro Pro Gly Thr Gly Leu His Leu Leu
35 40 45

Trp Asp His His Pro Arg Lys Gly Cys Ala Ala His Arg Arg Pro Leu 50 60

Arg Phe Tyr Ser Leu Tyr Asn Ile Trp Leu 65 70

- (2) INFORMATION FOR SEQ ID NO:229:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 59 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..59
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481895
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

Ser Leu Xaa Pro Ala Arg Glu Glu Ile Val Ser Ser Pro Ala Leu His 1 5 10 15

Gln Gln Ile Arg Leu Leu Ala Ser Ala Gly Phe Arg Pro Glu Arg Arg
20 25 30

Arg Gln Pro Thr Ser Asn Ser Ser Gly His Trp Ser Pro Pro Leu 35 40 45

- Gly Ser Pro Pro Lys Lys Arg Val Arg Gly Ala 50 55
- (2) INFORMATION FOR SEQ ID NO:230:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 91 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..91
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481896
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

Met Ser Ser Val Ser Asn Ser Ile Ala Val Gly Leu Pro Ser Tyr Gly
1 5 10 15

Leu Tyr Leu Glu Thr Arg Phe Leu Thr Gln Thr Tyr Arg Asn Phe Ala 20 25 30 Gln Lys Ser Ser Tyr Lys Tyr Ser Arg Ile Arg Ala Val Gln Gly Asn

Gln Lys Ser Ser Tyr Lys Tyr Ser Arg Ile Arg Ala Val Gln Gly Asn 35 40 45

Gly Gly Arg Arg Leu Val Asp Ile Ile Arg Ile Ile Pro Glu Leu 50 55 60

Ser Arg Asp Tyr Phe Lys Ser Arg Ser Arg Arg Ala Leu Phe Gly Gly 65 70 75 80

Ile Ser Leu Leu Gly Gly Phe Tyr Val Ala Gln
85 90

- (2) INFORMATION FOR SEQ ID NO:231:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 391 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..391
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481897
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

  tatgtggaaa ccatagctat tggggggaa gggcttatga gcgtcatttc aaggaatgc 60
  gtcatcagca tgggatgcga tgccttgsca ttccccaata ctaagaattt caatgaaatt 120
  acatccatcg aggaggcgaa agcgctctgg gagaaaattc aagcacgaca aggggtgaat 180
  aagtggcggc cagacctaga ggaagagtat gaagatcagg aaggcaacat ctacaacaag 240
  aagacctaca ctgacctgca gcgtcaaggc ctgatctagg gctcctgctg gttaaagttg 300
  tcgggatttg ttcagaactt atctcatgta gttgtaactc tgaaaatatt ggcccatctg 360
  gcatacattt tatgtaataa catgattctc c
- (2) INFORMATION FOR SEQ ID NO:232:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..92
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481898
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

Tyr Val Glu Thr Ile Ala Ile Gly Gly Glu Gly Leu Met Ser Val Ile
1 10 15

Ser Arg Asn Gly Val Ile Ser Met Gly Cys Asp Ala Leu Xaa Phe Pro 20 25 30

Asn Thr Lys Asn Phe Asn Glu Ile Thr Ser Ile Glu Glu Ala Lys Ala 35 40 45

Leu Trp Glu Lys Ile Gln Ala Arg Gln Gly Val Asn Lys Trp Arg Pro 50 55 60

Asp Leu Glu Glu Glu Tyr Glu Asp Gln Glu Gly Asn Ile Tyr Asn Lys 65 70 75 80

Lys Thr Tyr Thr Asp Leu Gln Arg Gln Gly Leu Ile 85 90

- (2) INFORMATION FOR SEQ ID NO:233:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 80 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..80
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481899
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

Met Ser Val Ile Ser Arg Asn Gly Val Ile Ser Met Gly Cys Asp Ala 1 10 15

Leu Xaa Phe Pro Asn Thr Lys Asn Phe Asn Glu Ile Thr Ser Ile Glu 20 25 30

Glu Ala Lys Ala Leu Trp Glu Lys Ile Gln Ala Arg Gln Gly Val Asn

Lys Trp Arg Pro Asp Leu Glu Glu Glu Tyr Glu Asp Gln Glu Gly Asn 50 55 60

Ile Tyr Asn Lys Lys Thr Tyr Thr Asp Leu Gln Arg Gln Gly Leu Ile
65 70 75 80

- (2) INFORMATION FOR SEQ ID NO:234:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 69 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..69
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481900
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

Met Gly Cys Asp Ala Leu Xaa Phe Pro Asn Thr Lys Asn Phe Asn Glu
1 10 15

Ile Thr Ser Ile Glu Glu Ala Lys Ala Leu Trp Glu Lys Ile Gln Ala 20 25 30

Arg Gln Gly Val Asn Lys Trp Arg Pro Asp Leu Glu Glu Glu Tyr Glu 35 40 45

Asp Gln Glu Gly Asn Ile Tyr Asn Lys Lys Thr Tyr Thr Asp Leu Gln 50 60

Arg Gln Gly Leu Ile

65

- (2) INFORMATION FOR SEQ ID NO:235:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 722 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..722
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481901
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

aatttattet caaacettat gagtgagate tetettaate attetetet tetteteee 60 tetgtgatgt gaggttega agateettet etgatteete ateaaactea gateagtage 120 ggaceeaagt catteetta gagagatata tggeagaggt gaaggateaa ttagagatta agtteegget taacgatggt tetgatateg gteetaaatt gttteetgat getactaceg 240 ttgetacatt gaagaaace gttgttgete agtggeeaag agataaggag aacgggeeaa 300 agacagtgaa agatgttaaa etgataageg egggtagaat attggagaae aacaaaacgg 360 ttggagattg eaggagteee gteggeaatt teteaggtge tgteaceae atgeatgtta 420

- (2) INFORMATION FOR SEQ ID NO:236:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 124 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..124
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481902
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

Met Ala Glu Val Lys Asp Gln Leu Glu Ile Lys Phe Arg Leu Asn Asp 1  $\phantom{\bigg|}$  5  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15

Gly Ser Asp Ile Gly Pro Lys Leu Phe Pro Asp Ala Thr Thr Val Ala 20 25 30

Thr Leu Lys Glu Thr Val Val Ala Gln Trp Pro Arg Asp Lys Glu Asn 35 40 45

Gly Pro Lys Thr Val Lys Asp Val Lys Leu Ile Ser Ala Gly Arg Ile 50 55 60

Leu Glu Asn Asn Lys Thr Val Gly Asp Cys Arg Ser Pro Val Gly Asn 65 70 75 80

Phe Ser Gly Ala Val Thr Thr Met His Val Ile Ile Gln His Gln Val 85 90 95

Thr Glu Lys Glu Lys Lys Lys Lys Pro Lys Gly Asp Leu Lys Gln
100 105 110

Asn Lys Cys Val Cys Leu Cys Phe Gly Ala Arg Cys 115 120

- (2) INFORMATION FOR SEQ ID NO:237:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 647 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..647
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481903
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

60 cccccttta ctacacactt cttcttttt cttcagaaag aaagaaagac agagagagag agagaagatg gtgttaggaa agcgtcatgg atcactgatc aagagaacaa ctagcatgaa 120 qatqatcaca ctcgatacac ccacgatcta tgacgcatct cagccgtccg atcatctaac 180 240 ctttcatcaa caccctcaca atccgatggt ggtgatggct agtaactacg atgatttctt 300 gaagacttgk agtctctgca atcgaagtct ctgccatcat cgtgacattt acatgtatag agggaacaac gcattttgta gcttagaatg cagggagaag caaattaagc tggacgagaa 360 420 aaaagcgaaa accggcttcg taacatcgaa gaaaccaatt cgtatttagt tgatcatcta 480 tgatctaaaa tgataacgat agtttttcct tatgagtaaa atgaatatgt tttkgcgtwt 540 cqtqtacaaq aatqatqaaa ataaaqaqag aaaaaatgag actaaatgag tgtagtgatc 600 atatagtaat qqqacttcat aaqcatqatt tqatttgttc gtgtgatttg tttctttgtg atgtgtaata tgtaatgtaa tatcaatgtt gatgtatatt caggtgg

- (2) INFORMATION FOR SEQ ID NO:238:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 135 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..135
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481904

Pro His Asn Pro Met Val Val Met Ala Ser Asn Tyr Asp Asp Phe Leu
70 75 80

Lys Thr Xaa Ser Leu Cys Asn Arg Ser Leu Cys His His Arg Asp Ile
85 90 95

Tyr Met Tyr Arg Gly Asn Asn Ala Phe Cys Ser Leu Glu Cys Arg Glu 100 105 110

Lys Gln Ile Lys Leu Asp Glu Lys Lys Ala Lys Thr Gly Phe Val Thr

Ser Lys Lys Pro Ile Arg Ile 130 135

- (2) INFORMATION FOR SEQ ID NO:239:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 113 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..113
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481905
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:
- Met Val Leu Gly Lys Arg His Gly Ser Leu Ile Lys Arg Thr Thr Ser

Met Lys Met Ile Thr Leu Asp Thr Pro Thr Ile Tyr Asp Ala Ser Gln
20 25 30

Pro Ser Asp His Leu Thr Phe His Gln His Pro His Asn Pro Met Val 35 40 45

Val Met Ala Ser Asn Tyr Asp Asp Phe Leu Lys Thr Xaa Ser Leu Cys
50 60

Asn Arg Ser Leu Cys His His Arg Asp Ile Tyr Met Tyr Arg Gly Asn
70 75 80

Asn Ala Phe Cys Ser Leu Glu Cys Arg Glu Lys Gln Ile Lys Leu Asp 85 90 95

Glu Lys Lys Ala Lys Thr Gly Phe Val Thr Ser Lys Lys Pro Ile Arg 100 105 110

Ile

- (2) INFORMATION FOR SEQ ID NO:240:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 97 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..97
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481906
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

Met Lys Met Ile Thr Leu Asp Thr Pro Thr Ile Tyr Asp Ala Ser Gln
1 10 15

Pro Ser Asp His Leu Thr Phe His Gln His Pro His Asn Pro Met Val 20 25 30

Val Met Ala Ser Asn Tyr Asp Asp Phe Leu Lys Thr Xaa Ser Leu Cys 35 40 45

Asn Arg Ser Leu Cys His His Arg Asp Ile Tyr Met Tyr Arg Gly Asn 50 55 60

Asn Ala Phe Cys Ser Leu Glu Cys Arg Glu Lys Gln Ile Lys Leu Asp 65 70 75 80

Glu Lys Lys Ala Lys Thr Gly Phe Val Thr Ser Lys Lys Pro Ile Arg 85 90 95

Ile

- (2) INFORMATION FOR SEQ ID NO:241:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 800 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..800
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481907
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

actttcatta gtttccaatt taacaaatca aaatcagaag aagaagaaga tgaccagctc 60 tgatcctcaa tctcacaacg tcttcgtcta cggtagcatt ctagaacccg ccgtcgccgc 120 180 cgtgatcctt gatcgcacag ccgatacagt ccccgccgtt ctccatggct agtacgctct ctcaccctct cgatgatcgt ttattcaatc ggagattaac aaaagattta tgggttttta 240 300 acagtcacag atataaactc aaaggacttc catatccatg tattgtttct tctgattctg qaaaagtcaa cggaaaggtt ataactggag tgtctgatgc tgagttaaat aatttcgatg 360 420 tgattgaagg taatgattat gagagagtaa ctgttgaagt tgtaagaatg gataattctg 480 aqaaqqtqaa aqttqaaact tatgtttggg ttaataaaga tgatcctaga atgtatggag 540 aatqqqattt cqaqqaatqq aqaqtqqttc acqcqqaqaa attcqtqqaq acttttagaa aaatgttgga atggaacaag aatccaaatg ggaagagcat ggaggaggct gtaggatcat 600 tattatcqtc aggggattaa ttcttgatga qcttggctaa tcttagcaga agagagtaag 660 tqaqtaaqta aaqaqtqqqt tttqaataat gtgttgttgg aacttgaaac agagtcttct 720 atgtgatttt gtttgtgttg ttatggatat cttgttggca ctttttctga tttcagttgg 780 aaacaggtgc gtttgcgggc

- (2) INFORMATION FOR SEQ ID NO:242:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 151 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..151

(D) OTHER INFORMATION: / Ceres Seq. ID 1481908 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:242: Met Ala Ser Thr Leu Ser His Pro Leu Asp Asp Arg Leu Phe Asn Arg 10 Arg Leu Thr Lys Asp Leu Trp Val Phe Asn Ser His Arg Tyr Lys Leu 25 Lys Gly Leu Pro Tyr Pro Cys Ile Val Ser Ser Asp Ser Gly Lys Val 40 Asn Gly Lys Val Ile Thr Gly Val Ser Asp Ala Glu Leu Asn Asn Phe 55 Asp Val Ile Glu Gly Asn Asp Tyr Glu Arg Val Thr Val Glu Val Val 70 Arg Met Asp Asn Ser Glu Lys Val Lys Val Glu Thr Tyr Val Trp Val 90 85 Asn Lys Asp Asp Pro Arg Met Tyr Gly Glu Trp Asp Phe Glu Glu Trp 105 110 100 Arg Val Val His Ala Glu Lys Phe Val Glu Thr Phe Arg Lys Met Leu 120 125 Glu Trp Asn Lys Asn Pro Asn Gly Lys Ser Met Glu Glu Ala Val Gly 140 135 Ser Leu Leu Ser Ser Gly Asp 150 (2) INFORMATION FOR SEQ ID NO:243: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 675 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..675
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481913
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

60 aactcaqtcq tctcaatqcc gtgtaacaac ttcatcgtct ttttcagttc aacaacttca 120 tegtettttt cagtteaace teegacatet etegteteea ggtgattgat cecategaag 180 qqtctatqqa aqaqaacaac aacqccggga qcgattccga ctctaattcc gtcgaagatt 240 cacaaqacta ttacqaaccg atctcagccg tcgatttata taactccaac gacgatgaag 300 aaqacaqtta tottocqato qqtqqaqatq qtotototaa cggccattgt atgattocgg atgcaqaqqt aqqaatctct tctattaqta taaacqataa cacagacagc gaagaagaga 360 420 cagaqacqqa gactggaccg gagatccgta gagcgtttga ggaggacgaa cggcggagaa ggtcgccgtt agtggaggag aatgccgtta gggttatgga ggcaatgcga gccatctcat 480 540 tccctggaac ggctcctgat tgggcctccg atgttaatga ggatcgttgg attgatcagc tgcgaagatt gagaaccact tctcaataag ctttctccaa tctcgatagt tgttttcgtt 600 taagatcttt ctcaatgttg ttcaatgtga cttcttttaa acattcaata taaaaaccag 660 agaatttcac cactc

- (2) INFORMATION FOR SEQ ID NO:244:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 147 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..147
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481914
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

Met Glu Glu Asn Asn Ala Gly Ser Asp Ser Asp Ser Asn Ser Val

#### Attorney Docket No. 2740-1096P Client Docket No. 80142.004

| CITCHE DOCKET NO. 80142.004 |            |            |            |              |           |            |            |            |           |           | r          |            |            |           |           |
|-----------------------------|------------|------------|------------|--------------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------------|-----------|-----------|
| 1                           |            |            |            | 5            |           |            |            |            | 10        |           |            |            |            | 15        |           |
| Glu                         | Asp        | Ser        | Gln<br>20  | Asp          | Tyr       | Tyr        | Glu        | Pro<br>25  | Ile       | Ser       | Ala        | Val        | Asp<br>30  | Leu       | Tyr       |
| Asn                         | Ser        | Asn<br>35  | Asp        | Asp          | Glu       | Glu        | Asp<br>40  | Ser        | Tyr       | Leu       | Pro        | Ile<br>45  | Gly        | Gly       | Asp       |
| Gly                         | Leu<br>50  | Ser        | Asn        | Gly          | His       | Cys<br>55  | Met        | Ile        | Pro       | Asp       | Ala<br>60  | Glu        | Val        | Gly       | Ile       |
| Ser<br>65                   | Ser        | Ile        | Ser        | Ile          | Asn<br>70 | Asp        | Asn        | Thr        | Asp       | Ser<br>75 | Glu        | Glu        | Glu        | Thr       | Glu<br>80 |
| Thr                         | Glu        | Thr        | Gly        | Pro<br>85    | Glu       | Ile        | Arg        | Arg        | Ala<br>90 | Phe       | Glu        | Glu        | Asp        | Glu<br>95 | Arg       |
| Arg                         | Arg        | Arg        | Ser<br>100 | Pro          | Leu       | Val        | Glu        | Glu<br>105 | Asn       | Ala       | Val        | Arg        | Val<br>110 | Met       | Glu       |
| Ala                         | Met        | Arg<br>115 | Ala        | Ile          | Ser       | Phe        | Pro<br>120 | Gly        | Thr       | Ala       | Pro        | Asp<br>125 | Trp        | Ala       | Ser       |
| Asp                         | Val<br>130 | Asn        | Glu        | Asp          | Arg       | Trp<br>135 | Ile        | Asp        | Gln       | Leu       | Arg<br>140 | Arg        | Leu        | Arg       | Thr       |
| Thr<br>145                  | Ser        | Gln        |            |              |           |            |            |            |           |           |            |            |            |           |           |
| (2)                         |            |            |            | FOR<br>CE CE |           |            |            | -          |           |           |            |            |            |           |           |
|                             |            | ( <i>I</i> | A) LI      | ENGTE        | 1: 92     | ami        | ino a      | acids      | 5         |           |            |            |            |           |           |
|                             |            | ( E        | 3) T       | PE:          | amir      | no ac      | cid        |            |           |           |            |            |            |           |           |
|                             |            | ,          | ,          | rani         |           |            |            |            |           |           |            |            |            |           |           |
|                             |            | ( I        | ) T(       | OPOLO        | OGY:      | line       | ear        |            |           |           |            |            |            |           |           |

- (ix) FEATURE:
   (A) NAME/KEY: peptide
  - (B) LOCATION: 1..92

(ii) MOLECULE TYPE: peptide

- (D) OTHER INFORMATION: / Ceres Seq. ID 1481915
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

Met Ile Pro Asp Ala Glu Val Gly Ile Ser Ser Ile Ser Ile Asn Asp  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Asn Thr Asp Ser Glu Glu Glu Thr Glu Thr Glu Thr Gly Pro Glu Ile 20 25 30

Arg Arg Ala Phe Glu Glu Asp Glu Arg Arg Arg Arg Ser Pro Leu Val 35 40 45

Glu Glu Asn Ala Val Arg Val Met Glu Ala Met Arg Ala Ile Ser Phe 50 60

Pro Gly Thr Ala Pro Asp Trp Ala Ser Asp Val Asn Glu Asp Arg Trp 65 70 75 80

Ile Asp Gln Leu Arg Arg Leu Arg Thr Thr Ser Gln 85 90

- (2) INFORMATION FOR SEQ ID NO:246:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 729 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..729
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481916
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

| acgattttta | tctgatttga | caccaaagta | tcttttagcc | ttaattcgtt | acgttgtaaa |  |
|------------|------------|------------|------------|------------|------------|--|
| gaaactgatc | caatcccttc | tattcggatt | atatagaccc | aatatgtaca | gatccgcgag |  |
| ctggaaccgt | gtgacggagg | attactcggt | gccttggtcc | gcaccaaagg | gattatggaa |  |
| gggcttagac | gaagacgagg | ccggctccat | acgateceae | tggccaaaag | atgactaaga |  |

aagagaagtc acgtaccaag tttgctgaaa acgccgttca cataatccct tttgtccttc 300 ttgcttgtgc tctcgtcctt tggttcttct ctaatccaga tgtagatgtt ggggtgaaag 360 gggacttcat tgcggctagg attgaaggat taacgatcga aggagacatt gacaatgaca 420 gcgacggamc tcagaccgga ttcttaggag ccgccacaga ggtcggacat tcaaaaaata 480 540 aactaaaacq cgaggctaat aaacgcaatc ggaggataca agcttcaagg aaagtgatga aaggttttta ttaatcacct ttttgtttga taaatgttta cgagataaac tttcaaaacg 600 660 aattattett tittitetti etattitgat tgegeatgit agitgateag gagatgigt 720 tctttggtta aacttttata tttagttctt cacattatct tcaagatcca caagaactac

- (2) INFORMATION FOR SEQ ID NO:247:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 78 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

tttcactct

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..78
- (D) OTHER INFORMATION: / Ceres Seq. ID 1481917
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:
- Arg Phe Leu Ser Asp Leu Thr Pro Lys Tyr Leu Leu Ala Leu Ile Arg

Tyr Val Val Lys Lys Leu Ile Gln Ser Leu Leu Phe Gly Leu Tyr Arg 20 25 30

Pro Asn Met Tyr Arg Ser Ala Ser Trp Asn Arg Val Thr Glu Asp Tyr 35 40 45

Ser Val Pro Trp Ser Ala Pro Lys Gly Leu Trp Lys Gly Leu Asp Glu
50 60

Asp Glu Ala Gly Ser Ile Arg Ser His Trp Pro Lys Asp Asp 65 70 75

- (2) INFORMATION FOR SEQ ID NO:248:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 107 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..107
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481918
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:
- Met Thr Lys Lys Glu Lys Ser Arg Thr Lys Phe Ala Glu Asn Ala Val

His Ile Ile Pro Phe Val Leu Leu Ala Cys Ala Leu Val Leu Trp Phe 20 25 30

Phe Ser Asn Pro Asp Val Asp Val Gly Val Lys Gly Asp Phe Ile Ala 35 40 45

Ala Arg Ile Glu Gly Leu Thr Ile Glu Gly Asp Ile Asp Asn Asp Ser 50 55 60

Asp Gly Xaa Gln Thr Gly Phe Leu Gly Ala Ala Thr Glu Val Gly His 65 70 75 80

Ser Lys Asn Lys Leu Lys Arg Glu Ala Asn Lys Arg Asn Arg Arg Ile 85 90 95

Gln Ala Ser Arg Lys Val Met Lys Gly Phe Tyr 100 105

- (2) INFORMATION FOR SEQ ID NO:249:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 674 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..674
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481919
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:249: ctgaacgaag ctctctctct gattggccgg atctgccgga gagaaaaatg acgacgagta 60 120 ttcacatcac agctctcgac ggaatcgtca acgtgaactc actcttcaca ctcgccgtat 180 tcatcggatt agcttggaac cctaccgatc cagacaacag cctcgtaacc gaccctaatt gcgtccccac agctcgtatg gctgagaatc tcgtcgcctt ccatgtgtac tctttcgcat 240 cattcctatt ctcaagtctc atcgctctag gtctcaaaca agcaatgagg ctcaacatag 300 cttcttcgtt tcacatctct actcgaatcg atcctgtggt ttactatgtg aacaagacgg 360 420 ctcttagatt tgggatggtt acatccggtt tgggatcggt ttgtggatgt gggtttctca tgttggcttt gattaatgtt gttcagatca agcttgggac tttgggctgt ggtgctagtg 480 gtcatactta tgcagctgtt gtgccgcttt gtgattctgg ttccttctgc acttttcatc 540 tatgtttctc ttatgttata tgcttttact cgttagagac atggtttttg attccatggt 600 660 gytttgatat ggtt
- (2) INFORMATION FOR SEQ ID NO:250:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 224 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..224
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481920
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:
- Glu Arg Ser Ser Leu Ser Asp Trp Pro Asp Leu Pro Glu Arg Lys Met
  1 10 15
- Thr Thr Ser Ile His Ile Thr Ala Leu Asp Gly Ile Val Asn Val Asn 20 25 30
- Ser Leu Phe Thr Leu Ala Val Phe Ile Gly Leu Ala Trp Asn Pro Thr 35 40 45
- Asp Pro Asp Asn Ser Leu Val Thr Asp Pro Asn Cys Val Pro Thr Ala 50 55 60
- Arg Met Ala Glu Asn Leu Val Ala Phe His Val Tyr Ser Phe Ala Ser 65 70 75 80
- Phe Leu Phe Ser Ser Leu Ile Ala Leu Gly Leu Lys Gln Ala Met Arg
  85 90 95
- Leu Asn Ile Ala Ser Ser Phe His Ile Ser Thr Arg Ile Asp Pro Val
- Val Tyr Tyr Val Asn Lys Thr Ala Leu Arg Phe Gly Met Val Thr Ser 115 120 125
- Gly Leu Gly Ser Val Cys Gly Cys Gly Phe Leu Met Leu Ala Leu Ile
- Asn Val Val Gln Ile Lys Leu Gly Thr Leu Gly Cys Gly Ala Ser Gly 145 150 155 160
- His Thr Tyr Ala Ala Val Val Pro Leu Cys Asp Ser Gly Ser Phe Cys 165 170 175
- Thr Phe His Leu Cys Phe Ser Tyr Val Ile Cys Phe Tyr Ser Leu Glu 180 185 190
- Thr Trp Phe Leu Ile Pro Trp Leu Met Gln Leu Gly Leu Cys Leu Tyr

195 200 205
Asp Asp Asp Met Met Glu Met Arg Met Ile Leu Xaa Phe Asp Met Val
210 215 220

- (2) INFORMATION FOR SEQ ID NO:251:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 209 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..209
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481921
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

Met Thr Thr Ser Ile His Ile Thr Ala Leu Asp Gly Ile Val Asn Val 1 10 15

Asn Ser Leu Phe Thr Leu Ala Val Phe Ile Gly Leu Ala Trp Asn Pro

Thr Asp Pro Asp Asn Ser Leu Val Thr Asp Pro Asn Cys Val Pro Thr 35 40 45

Ala Arg Met Ala Glu Asn Leu Val Ala Phe His Val Tyr Ser Phe Ala 50 60

Ser Phe Leu Phe Ser Ser Leu Ile Ala Leu Gly Leu Lys Gln Ala Met 65 70 75 80

Arg Leu Asn Ile Ala Ser Ser Phe His Ile Ser Thr Arg Ile Asp Pro 85 90 95

Val Val Tyr Tyr Val Asn Lys Thr Ala Leu Arg Phe Gly Met Val Thr 100 105 110

Ser Gly Leu Gly Ser Val Cys Gly Cys Gly Phe Leu Met Leu Ala Leu 115 120 125

Ile Asn Val Val Gln Ile Lys Leu Gly Thr Leu Gly Cys Gly Ala Ser 130 135 140

Gly His Thr Tyr Ala Ala Val Val Pro Leu Cys Asp Ser Gly Ser Phe 145 150 155 160

Cys Thr Phe His Leu Cys Phe Ser Tyr Val Ile Cys Phe Tyr Ser Leu 165 170 175

Glu Thr Trp Phe Leu Ile Pro Trp Leu Met Gln Leu Gly Leu Cys Leu 180 185 190

Tyr Asp Asp Asp Met Met Glu Met Arg Met Ile Leu Xaa Phe Asp Met 195 200 205

Val

- (2) INFORMATION FOR SEQ ID NO:252:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 159 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..159
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481922
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

Met Ala Glu Asn Leu Val Ala Phe His Val Tyr Ser Phe Ala Ser Phe 1 5 10 15

145

Leu Phe Ser Ser Leu Ile Ala Leu Gly Leu Lys Gln Ala Met Arg Leu 25 Asn Ile Ala Ser Ser Phe His Ile Ser Thr Arg Ile Asp Pro Val Val 40 Tyr Tyr Val Asn Lys Thr Ala Leu Arg Phe Gly Met Val Thr Ser Gly Leu Gly Ser Val Cys Gly Cys Gly Phe Leu Met Leu Ala Leu Ile Asn 75 Val Val Gln Ile Lys Leu Gly Thr Leu Gly Cys Gly Ala Ser Gly His 85 90 Thr Tyr Ala Ala Val Val Pro Leu Cys Asp Ser Gly Ser Phe Cys Thr 105

Phe His Leu Cys Phe Ser Tyr Val Ile Cys Phe Tyr Ser Leu Glu Thr

120 115 Trp Phe Leu Ile Pro Trp Leu Met Gln Leu Gly Leu Cys Leu Tyr Asp

135 Asp Asp Met Met Glu Met Arg Met Ile Leu Xaa Phe Asp Met Val

155

- (2) INFORMATION FOR SEQ ID NO:253:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 724 base pairs
    - (B) TYPE: nucleic acid

150

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..724
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481923
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:253: aaaaagaagg atcaagaacc caaaatagag agcccaattt ctcttaaact tgccaaagta 60 gctatcaggt ggttcttgat acggaacttc cagatcccaa gcagcagcag aggcctcatc 120 accgtcgcct ccaccgagga aatctccggc agcgattctt gacttgatga aacggagctt 180 gtgagtggcg agaccgagtg agcttatggc agcgacgctg gtacttgaag ccgttgatgc 240 aacggagagt ttgagcgacg gagacgtaga agaagaggtg agagaaggat aggaggcaga 300 tgggtgccca gcaatggcgg cagtgaagac gacctgaggg ttgagagagg gagaagaaga 360 ttacggcgag gaagatgaag aagagctgaa atagcttgtg ggagcttctt cttctggtgg 420 480 tcaatqqctc qtttcttctc taaggttttc tcgaagtgga gctggattat tgagtttagt gcttgtagag cagtttcttt ggggatgaaa ggttggttat tctggtcaat ttcgtcgtcg 540 tagtccgcca ttgaaggact gagaagagag aaaaagtgtt attggttaga gagatggttt 600 ggggattgtg tgtagygaac atgtgggtgt ggtytcgtat ctctagacaa gtattatcca 660 tctcaacggt cttgttctga tttttgatgt tttgtccgta ctcaataaat attttactgg 720 gagt
- (2) INFORMATION FOR SEQ ID NO:254:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 53 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..53
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481924
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:
- Lys Lys Lys Asp Gln Glu Pro Lys Ile Glu Ser Pro Ile Ser Leu Lys 10
- Leu Ala Lys Val Ala Ile Arg Trp Phe Leu Ile Arg Asn Phe Gln Ile 25

Pro Ser Ser Ser Arg Gly Leu Ile Thr Val Ala Ser Thr Glu Glu Ile
35 40 45

Ser Gly Ser Asp Ser
50
(2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 39 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..39
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481925
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

Met Ala Arg Phe Phe Ser Lys Val Phe Ser Lys Trp Ser Trp Ile Ile 1 5 10 15

Glu Phe Ser Ala Cys Arg Ala Val Ser Leu Gly Met Lys Gly Trp Leu 20 25 30

Phe Trp Ser Ile Ser Ser Ser 35

- (2) INFORMATION FOR SEQ ID NO:256:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 453 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..453
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481941
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

gcatcgcatc gatcctccca tctgcgcacc cgcaagcyta ttcgccgcac ctcctcaggt 60 gaccgggaag atgatgccgt tgagccaaac cgacttctcg ccgtcgcagt tcacctcct 120 ccagaatgcc gccgccgact ccaccacgcc ttccaagatg cgcggcgcgt ccagcaccat gcctctcacc gtgaagcagg tcgtcgacgc gcacgagtct ggcacgggcg acaagggcgc 240 tccgttcatc gtcaatggcg tcgagatggc taacgtaccg ataatcctct tgttcgtcct ttggtccgtt gatatgcaga tgttctcggc gttaattcat ctgccgcggt tccctttca 300 gattcgactt gtggggatgg tcaatgccaa ggtggagcgg acgaccgatg tgaccttcac 420 gctcgacgat ggcaccggcc qcctcgatt cat

- (2) INFORMATION FOR SEQ ID NO:257:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 150 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..150
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481942
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

His Arg Ile Asp Pro Pro Ile Cys Ala Pro Ala Ser Xaa Phe Ala Ala 1 5 10 15

Pro Pro Gln Val Thr Gly Lys Met Met Pro Leu Ser Gln Thr Asp Phe 20 25 30

Ser Pro Ser Gln Phe Thr Ser Ser Gln Asn Ala Ala Ala Asp Ser Thr

40 Thr Pro Ser Lys Met Arg Gly Ala Ser Ser Thr Met Pro Leu Thr Val 5.5 60 Lys Gln Val Val Asp Ala His Glu Ser Gly Thr Gly Asp Lys Gly Ala Pro Phe Ile Val Asn Gly Val Glu Met Ala Asn Val Pro Ile Ile Leu 90 Leu Phe Val Leu Trp Ser Val Asp Met Gln Met Phe Ser Ala Leu Ile 105 His Leu Pro Arg Phe Pro Phe Gln Ile Arg Leu Val Gly Met Val Asn 120 Ala Lys Val Glu Arg Thr Thr Asp Val Thr Phe Thr Leu Asp Asp Gly 135 Thr Gly Arg Leu Asp Phe 150 (2) INFORMATION FOR SEQ ID NO:258: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 127 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..127 (D) OTHER INFORMATION: / Ceres Seq. ID 1481943 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:258: Met Met Pro Leu Ser Gln Thr Asp Phe Ser Pro Ser Gln Phe Thr Ser 10 Ser Gln Asn Ala Ala Ala Asp Ser Thr Thr Pro Ser Lys Met Arg Gly 25 Ala Ser Ser Thr Met Pro Leu Thr Val Lys Gln Val Val Asp Ala His 40 Glu Ser Gly Thr Gly Asp Lys Gly Ala Pro Phe Ile Val Asn Gly Val Glu Met Ala Asn Val Pro Ile Ile Leu Leu Phe Val Leu Trp Ser Val 70 Asp Met Gln Met Phe Ser Ala Leu Ile His Leu Pro Arg Phe Pro Phe 85 90 Gln Ile Arg Leu Val Gly Met Val Asn Ala Lys Val Glu Arg Thr Thr 105 Asp Val Thr Phe Thr Leu Asp Asp Gly Thr Gly Arg Leu Asp Phe 115 120 (2) INFORMATION FOR SEQ ID NO:259: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 126 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..126 (D) OTHER INFORMATION: / Ceres Seq. ID 1481944 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:259: Met Pro Leu Ser Gln Thr Asp Phe Ser Pro Ser Gln Phe Thr Ser Ser

10

Gln Asn Ala Ala Ala Asp Ser Thr Thr Pro Ser Lys Met Arg Gly Ala
20 25 30

 Ser
 Ser
 Thr
 Met
 Pro
 Leu
 Thr
 Val
 Lys
 Gln
 Val
 Val
 Asp
 Ala
 His
 Glu

 Ser
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 Gly
 Ala
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Ile Arg Leu Val Gly Met Val Asn Ala Lys Val Glu Arg Thr Thr Asp 100 105 110

Val Thr Phe Thr Leu Asp Asp Gly Thr Gly Arg Leu Asp Phe 115 120 125

- (2) INFORMATION FOR SEQ ID NO:260:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 677 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..677
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481949
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:260: 60 acattctagt acaatatagt ggttgtgctc ctctattcta tttccttgtt gctactagtc tgagttgtga gattagtgtt gctaacaatt tggaagacgc ggastccttt tcacctctag 120 caaggttctc caaatcgtcc gctaaatttt acaggcgtcg ccagagccgc taattgtcgt 180 ggatcttcag acgtccgcta cacgccgatt cactcctct cccgcgctag ggcggaacct 240 tctcccttgc gtcttcccat cgcaaggtct tgtccatgcc gacagctagt tcccgacgga 300 cttcctcgga ggcggtcagc accgacgacg aggaggctgc gcggggaagc aagggcggac 360 gaccetegee geogegetge tegtegtgea ggtagtegge tacttettae aeggtegeeg 420 ccggtgttgg gctctccgac agtgctgtca tcgatggtgc agactctctg cacagccacg 480 ccgatgagct ctcctctgtt gtcgtggaca tgcttcacgg ttcctcsctc gcggccacaa 540 caagegatgg tggtggctgg tgcgctctag gtgctcgatg aaaggtgtgt ttgtagttcg 600 gcacttttta ccacaggaaa gagagagaag taaacaatat gcatgcgaag tcaataaaag 660 tgaaatcgaa attcttt
- (2) INFORMATION FOR SEQ ID NO:261:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 56 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..56
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481950
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:
- Ile Leu Val Gln Tyr Ser Gly Cys Ala Pro Leu Phe Tyr Phe Leu Val
- Ala Thr Ser Leu Ser Cys Glu Ile Ser Val Ala Asn Asn Leu Glu Asp 20 25 30
- Ala Xaa Ser Phe Ser Pro Leu Ala Arg Phe Ser Lys Ser Ser Ala Lys 35 40 45
- Phe Tyr Arg Arg Arg Gln Ser Arg 50 55
- (2) INFORMATION FOR SEQ ID NO:262:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 39 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..39
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481951

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

Met Pro Thr Ala Ser Ser Arg Arg Thr Ser Ser Glu Ala Val Ser Thr  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Asp Asp Glu Glu Ala Ala Arg Gly Ser Lys Gly Gly Arg Pro Ser Pro 20 25 30

Pro Arg Cys Ser Ser Cys Arg

- (2) INFORMATION FOR SEQ ID NO:263:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 38 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..38
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481952
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

Met Val Gln Thr Leu Cys Thr Ala Thr Pro Met Ser Ser Pro Leu Leu  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ser Trp Thr Cys Phe Thr Val Pro Xaa Ser Arg Pro Gln Gln Ala Met 20 25 30

Val Val Ala Gly Ala Leu 35

- (2) INFORMATION FOR SEQ ID NO:264:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 588 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..588
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481965
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

60 caacttcttg ccattgattc agcagctgca gtgcagctac ttcggaggtc tctgattggt 120 gatgaattaa caggaaaaga aaagaaagcc ctgcgcagaa ccatgactga cctggcgtca 180 gttattccca tcggtattct aatgcttctt cctgttacag cggttggtca cgctgccatg 240 ctgqctgqaa ttcagagata tgtaccaggc ctgattcctt ccacatacgg gtccgaaagg ttqaacctat tgagacagct tgagaaaatc aaggaactgc aaacaaatga aaccgagagc 300 qaaqaaqqcq taqaqqaaat agcattatga gtaqaaggaa gcaatataga cttgtacctc 360 420 tattcacttt gttcggtaat tcattgccaa aagctgcgca tagagaatct cgttccatgt 480 qtccqgtact ccqqgtaagc accagtgact gcagtcttga ggagcatctt caggagttcc 540 cqqttctcqa taccqcqaaq qatqaqcatc tttcctgaac tcggtcagat atgtaatgtt caqaaactta accttactat gttcatatct catttcttgg attgcttg

- (2) INFORMATION FOR SEQ ID NO:265:
  - (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids

(B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..109
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481966
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

Gln Leu Leu Ala Ile Asp Ser Ala Ala Val Gln Leu Leu Arg Arg

1 10 15

Ser Leu Ile Gly Asp Glu Leu Thr Gly Lys Glu Lys Lys Ala Leu Arg 20 25 30

Arg Thr Met Thr Asp Leu Ala Ser Val Ile Pro Ile Gly Ile Leu Met
35 40 45

Leu Leu Pro Val Thr Ala Val Gly His Ala Ala Met Leu Ala Gly Ile 50 55 60

Gln Arg Tyr Val Pro Gly Leu Ile Pro Ser Thr Tyr Gly Ser Glu Arg
65 70 75 80

Leu Asn Leu Leu Arg Gln Leu Glu Lys Ile Lys Glu Leu Gln Thr Asn
85 90 95

Glu Thr Glu Ser Glu Glu Gly Val Glu Glu Ile Ala Leu 100 105

- (2) INFORMATION FOR SEQ ID NO: 266:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 75 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..75
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481967
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

Met Thr Asp Leu Ala Ser Val Ile Pro Ile Gly Ile Leu Met Leu Leu 1 5 10 15

Pro Val Thr Ala Val Gly His Ala Ala Met Leu Ala Gly Ile Gln Arg
20 25 30

Tyr Val Pro Gly Leu Ile Pro Ser Thr Tyr Gly Ser Glu Arg Leu Asn 35 40 45

Leu Leu Arg Gln Leu Glu Lys Ile Lys Glu Leu Gln Thr Asn Glu Thr 50 55 60

Glu Ser Glu Glu Glu Glu Glu Ile Ala Leu
65 70 75

- (2) INFORMATION FOR SEQ ID NO:267:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 63 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..63
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481968
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

Met Ser Arg Arg Lys Gln Tyr Arg Leu Val Pro Leu Phe Thr Leu Phe 1 5 10 15 Gly Asn Ser Leu Pro Lys Ala Ala His Arg Glu Ser Arg Ser Met Cys

20 25 30

Pro Val Leu Arg Val Ser Thr Ser Asp Cys Ser Leu Glu Glu His Leu
35 40 45

Gln Glu Phe Pro Val Leu Asp Thr Ala Lys Asp Glu His Leu Ser

Sin Glu Phe Pro Val Leu Asp Thr Ala Lys Asp Glu His Leu Ser 50 55 60

- (2) INFORMATION FOR SEQ ID NO:268:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 498 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..498
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481973
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:268: accatcacga atcgcgattt ttttttgaga ttacggaagc ttcgcttgat ttgggatttt 60 tagggttttc tttctccgaa gacgactccg agagaccaac agtgatttga caatgacgct 120 180 acctccaggt ctttactccg gcaccagctc tcttgctctg gtggctcgtg cttcggcttt tgggttgggt ctcgtctatg ggaacatgaa gctcaagatc aaatcgatgt cacagaagaa 240 ggttgaagcc accgctcatc attaaaccac tcgttctttc tttacaataa gatgccaaaa 300 gctgggggtg atgtctcccc ggttagtttg atttcttctt tcatgattca tcctttagca 360 taagaaggaa caaatgtgtt tttgaaaagc atattatacg gttttaagac ctttttggag 420 ccataattgc cattggctta aaacccgagt caagaacatc tttccatttg ttgtcatcca 480 ataacaccgt tcacattc
- (2) INFORMATION FOR SEQ ID NO:269:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 35 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..35
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481974
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

  His His Glu Ser Arg Phe Phe Phe Glu Ile Thr Glu Ala Ser Leu Asp

  1 5 10 15

  Leu Gly Phe Leu Gly Phe Ser Phe Ser Glu Asp Asp Ser Glu Arg Pro

  20 25 30

Thr Val Ile

35

- (2) INFORMATION FOR SEQ ID NO:270:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 50 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..50
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481975
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:
- Met Thr Leu Pro Pro Gly Leu Tyr Ser Gly Thr Ser Ser Leu Ala Leu
  1 5 10 15
  Val Ala Arg Ala Ser Ala Phe Gly Leu Gly Leu Val Tyr Gly Asn Met

20 Lys Leu Lys Ile Lys Ser Met Ser Gln Lys Lys Val Glu Ala Thr Ala 40 45

His His

50

(2) INFORMATION FOR SEQ ID NO:271:

Attorney Docket No. 2740-1096P Client Docket No. 80142.004

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 800 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..800
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481976
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:271: atctatgcct acaccaacaa gcaacggtca tgcctctcgc gtgcagattc aagaaccaag 60 aataatqtct cctcttcctc cttcttcttc tccaatcgcc ttcaaggaac aacaaggtag 120 accacctcca acaacacaac aaaccatagc aggaaaactc tttagaactc ttttcaaggg 180 240 tettetette teacaactaa cettaatete aettttggtg ategttetea ceattegegg 300 totoatotoa quaaqtacac accatttoca cotoaagaaa tggtaccoto otttactago atctqttqct gtctcaggaa ttgcatcttt agcatggcaa tgcatcttta tctacaatcc 360 420 atcaaqaqca qtcaaaqcaa cgttctggct tagtccaata ctcacctgct cggtaggaat cttgcttgtt ttgattggct cagcggtaga tgcaggtata ggtgcagtgt ttgtcctttt 480 cgccattact cagtccctct atggttgctg gattactccg aggcttgagt acaccgataa 540 600 aatattatca cttqccacaq catttccacc tqcaagaacc agagaagtag tctqcttatc aatcatagtc agtgtcgttt actctggttt cttggtgact ggaattggag gagcaacttc 660 cactagaaca aatcttgata tcttgttcat atccgtaatc ataataagct tagcatggac 720 gatgcaagtt atcaagaatg ttcaacaagt tgcgatttca cgggcgagat atgtaaactt 780 tgcacatgga gaagatatgg
- (2) INFORMATION FOR SEQ ID NO:272:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 266 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..266
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481977
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:
- Ser Met Pro Thr Pro Thr Ser Asn Gly His Ala Ser Arg Val Gln Ile 10
- Gln Glu Pro Arg Ile Met Ser Pro Leu Pro Pro Ser Ser Pro Ile 25
- Ala Phe Lys Glu Gln Gln Gly Arg Pro Pro Pro Thr Thr Gln Gln Thr 40 45
- Ile Ala Gly Lys Leu Phe Arg Thr Leu Phe Lys Gly Leu Leu Phe Ser 55 60
- Gln Leu Thr Leu Ile Ser Leu Leu Val Ile Val Leu Thr Ile Arg Gly 75 70
- Leu Ile Ser Ala Ser Thr His His Phe His Leu Lys Lys Trp Tyr Pro 90 95
- Pro Leu Leu Ala Ser Val Ala Val Ser Gly Ile Ala Ser Leu Ala Trp 105
- Gln Cys Ile Phe Ile Tyr Asn Pro Ser Arg Ala Val Lys Ala Thr Phe 120 125

Trp Leu Ser Pro Ile Leu Thr Cys Ser Val Gly Ile Leu Leu Val Leu 135 Ile Gly Ser Ala Val Asp Ala Gly Ile Gly Ala Val Phe Val Leu Phe 155 150 Ala Ile Thr Gln Ser Leu Tyr Gly Cys Trp Ile Thr Pro Arg Leu Glu 170 165 Tyr Thr Asp Lys Ile Leu Ser Leu Ala Thr Ala Phe Pro Pro Ala Arg 185 Thr Arg Glu Val Val Cys Leu Ser Ile Ile Val Ser Val Val Tyr Ser 200 Gly Phe Leu Val Thr Gly Ile Gly Gly Ala Thr Ser Thr Arg Thr Asn 215 220 Leu Asp Ile Leu Phe Ile Ser Val Ile Ile Ser Leu Ala Trp Thr 230 235 Met Gln Val Ile Lys Asn Val Gln Gln Val Ala Ile Ser Arg Ala Arg

Met Gln Val Ile Lys Asn Val Gln Gln Val Ala Ile Ser Arg Ala Ard 245 250 255

Tyr Val Asn Phe Ala His Gly Glu Asp Met 260 265

- (2) INFORMATION FOR SEQ ID NO:273:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 265 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..265
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481978
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:
- Met Pro Thr Pro Thr Ser Asn Gly His Ala Ser Arg Val Gln Ile Gln 1 5 10 15
- Glu Pro Arg Ile Met Ser Pro Leu Pro Pro Ser Ser Ser Pro Ile Ala 20 25 30 Phe Lys Glu Gln Gln Gly Arg Pro Pro Pro Thr Thr Gln Gln Thr Ile
- 35 40 45
  Ala Gly Lys Leu Phe Arg Thr Leu Phe Lys Gly Leu Leu Phe Ser Gln
- 50 55 60 Leu Thr Leu Ile Ser Leu Leu Val Ile Val Leu Thr Ile Arg Gly Leu
- 65 70 75 80

  Ile Ser Ala Ser Thr His His Phe His Leu Lys Lys Trp Tyr Pro Pro
- 85 90 95 Leu Leu Ala Ser Val Ala Val Ser Gly Ile Ala Ser Leu Ala Trp Gln
- 100 105 110

  Cys Ile Phe Ile Tyr Asn Pro Ser Arg Ala Val Lys Ala Thr Phe Trp
  115 120 125
- Leu Ser Pro Ile Leu Thr Cys Ser Val Gly Ile Leu Leu Val Leu Ile 130 135 140
- Gly Ser Ala Val Asp Ala Gly Ile Gly Ala Val Phe Val Leu Phe Ala 145 150 155 160
- Ile Thr Gln Ser Leu Tyr Gly Cys Trp Ile Thr Pro Arg Leu Glu Tyr
  165 170 175
- Thr Asp Lys Ile Leu Ser Leu Ala Thr Ala Phe Pro Pro Ala Arg Thr 180 185 190
- Arg Glu Val Val Cys Leu Ser Ile Ile Val Ser Val Val Tyr Ser Gly 195 200 205
- Phe Leu Val Thr Gly Ile Gly Gly Ala Thr Ser Thr Arg Thr Asn Leu 210 215 220
- Asp Ile Leu Phe Ile Ser Val Ile Ile Ile Ser Leu Ala Trp Thr Met

225 230 235 240 Gln Val Ile Lys Asn Val Gln Gln Val Ala Ile Ser Arg Ala Arg Tyr 245 250 255 Val Asn Phe Ala His Gly Glu Asp Met

(2) INFORMATION FOR SEQ ID NO:274:

260

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 245 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..245
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481979
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

Met Ser Pro Leu Pro Pro Ser Ser Ser Pro Ile Ala Phe Lys Glu Gln  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Gln Gly Arg Pro Pro Thr Thr Gln Gln Thr Ile Ala Gly Lys Leu 20 25 30

Phe Arg Thr Leu Phe Lys Gly Leu Leu Phe Ser Gln Leu Thr Leu Ile 35 40 45

Ser Leu Leu Val Ile Val Leu Thr Ile Arg Gly Leu Ile Ser Ala Ser 50 55 60

Thr His His Phe His Leu Lys Lys Trp Tyr Pro Pro Leu Leu Ala Ser 65 70 75 80

Val Ala Val Ser Gly Ile Ala Ser Leu Ala Trp Gln Cys Ile Phe Ile 85 90 95

Tyr Asn Pro Ser Arg Ala Val Lys Ala Thr Phe Trp Leu Ser Pro Ile 100 105 110

Leu Thr Cys Ser Val Gly Ile Leu Leu Val Leu Ile Gly Ser Ala Val
115 120 125

Asp Ala Gly Ile Gly Ala Val Phe Val Leu Phe Ala Ile Thr Gln Ser 130 135 140

Leu Tyr Gly Cys Trp Ile Thr Pro Arg Leu Glu Tyr Thr Asp Lys Ile 145 150 155 160

Leu Ser Leu Ala Thr Ala Phe Pro Pro Ala Arg Thr Arg Glu Val Val 165 170 175

Cys Leu Ser Ile Ile Val Ser Val Val Tyr Ser Gly Phe Leu Val Thr 180 185 190

Gly Ile Gly Gly Ala Thr Ser Thr Arg Thr Asn Leu Asp Ile Leu Phe 195 200 205

Ile Ser Val Ile Ile Ile Ser Leu Ala Trp Thr Met Gln Val Ile Lys 210 215 220

Asn Val Gln Gln Val Ala Ile Ser Arg Ala Arg Tyr Val Asn Phe Ala 225 230 235 240

His Gly Glu Asp Met

245

- (2) INFORMATION FOR SEQ ID NO:275:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 711 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..711

|      | (D) OTH  | ER INFORMATION | N: / | Ceres  | Seq. | ID | 1481980 |
|------|----------|----------------|------|--------|------|----|---------|
| (xi) | SEQUENCE | DESCRIPTION:   | SEQ  | ID NO: | 275: |    |         |

| tcctttgatt | tgatcgcctt | cctaggcatg | ggcctcccgt | caaagcccgg | gacatgagga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| atggctctcc | agtaatcctt | gtcttctttc | cgataaggcg | tgtcgttatc | ctcgagctcc | 120 |
| atcttgttca | tatcgtcggc | aatctcctcg | gcgcgagtca | taaactgaac | cacaggactc | 180 |
| gctcgaaaac | tctcccacca | tttctgctca | gcttcaatct | cttctgtgct | cggattctcc | 240 |
| ttcttctcga | aaactggatc | ttcgttgaga | agcttatcca | cttctggagt | gtgcctgtaa | 300 |
| tccggtatgt | tctcacactc | ccataagaac | tgctctgcta | tttgcttgta | cggtcctggt | 360 |
| tcgtcggttc | ctgctgtttc | gggttttggg | gacttctttg | agaattttgg | aagtccaatc | 420 |
| gaagcgaaat | tcggagactg | cgacttggga | aagaaggaat | cagcgagcga | gacgaasttg | 480 |
| atggacggga | ctgggttcgg | tggtttctcg | aaccagtttt | gaaatggatt | gaagttcatc | 540 |
| gacgacattg | ttgaacacac | atacagtcgt | tctccagcca | aagccaaaag | aaaattaggg | 600 |
| ttcagggctt | tattggctga | tgttgttccg | actcagtaag | ctcaggtgga | ttagatgtgg | 660 |
| aagacqaagt | gtgactgacc | caacccagcg | attaaacatc | atgtcgtttt | q          |     |

- (2) INFORMATION FOR SEQ ID NO:276:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 90 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..90
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481981
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:
- Met Arg Asn Gly Ser Pro Val Ile Leu Val Phe Phe Pro Ile Arg Arg 1  $\phantom{\bigg|}$  5  $\phantom{\bigg|}$  10  $\phantom{\bigg|}$  15
- Val Val Ile Leu Glu Leu His Leu Val His Ile Val Gly Asn Leu Leu  $20 \hspace{1cm} 25 \hspace{1cm} 30$
- Gly Ala Ser His Lys Leu Asn His Arg Thr Arg Ser Lys Thr Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Pro Phe Leu Leu Ser Phe Asn Leu Phe Cys Ala Arg Ile Leu Leu Leu 50 55 60
- Leu Glu Asn Trp Ile Phe Val Glu Lys Leu Ile His Phe Trp Ser Val 65 70 75 80
- Pro Val Ile Arg Tyr Val Leu Thr Leu Pro 85 90
- (2) INFORMATION FOR SEQ ID NO:277:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 71 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..71
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481982
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:
- Met Phe Ser His Ser His Lys Asn Cys Ser Ala Ile Cys Leu Tyr Gly
  1 5 10 15
- Pro Gly Ser Ser Val Pro Ala Val Ser Gly Phe Gly Asp Phe Phe Glu
- Asn Phe Gly Ser Pro Ile Glu Ala Lys Phe Gly Asp Cys Asp Leu Gly 35 40 45
- Lys Lys Glu Ser Ala Ser Glu Thr Xaa Leu Met Asp Gly Thr Gly Phe 50 55 60
- Gly Gly Phe Ser Asn Gln Phe

| 6 | 5 | 7 | 0 |  |
|---|---|---|---|--|
|   |   |   |   |  |

- (2) INFORMATION FOR SEQ ID NO:278:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 750 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..750
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481983
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:278: aacattacac acagttcaag aaagagatcg atgtcgacct tggaatctcc attagaggct 60 ctggcgtttg aatacgctag cttcggtgtt ttcgccgtcg tcaacaacgt ctggacatgg 120 atcgccgtcg tgactgccgc cgtcagcttc tggaggatca gagtcacaac catcggagtc 180 ggagacggcc atgcatgtgt cttgatagaa gaattaaccg gttctaaatc tgaaaacgaa 240 tccggtcgtc tcgaaccaaa atcaataacc ggtccggtca aagaaacggt tgcacgagtg 300 360 aaqqaaacqq ttacqaaaac ggaqccqtta atatqcqatq acqqaqtqac aaaqaqqaaq 420 ctqacqatqt actacqaggt agacgttgac gttgacggtg ggaggtgtgt taacggagat 480 ttaacggcag ttagctacgg aggaggtttg ggtaattgtg gcggggattg gstgggagaa atgggatgga gtggtgagga tgagaaatgg tgatgacagt tggtaccgtt acgtggattt 540 aacqgtgatt aatggaaatg tggtaaggtt atgggacgac aacaaaacac tagtaacggc 600 660 ggcatgtgtc taaattagac aagtttcata tttcggaaag tttttaaatc tagagaaact ttcttgcttt aaagtttttt tttttttggt tgattaagat ctgtaatttg taaataattt 720
- tcacvrcaag agaccaagaa ggaacgcttg (2) INFORMATION FOR SEQ ID NO:279:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 170 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..170
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481984
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:
- Asn Ile Thr His Ser Ser Arg Lys Arg Ser Met Ser Thr Leu Glu Ser 1 10 15
  Pro Leu Glu Ala Leu Ala Phe Glu Tyr Ala Ser Phe Gly Val Phe Ala
- 20 25 30 Val Val Asn Asn Val Trp Thr Trp Ile Ala Val Val Thr Ala Ala Val
- 35 40 45
  Ser Phe Trp Arg Ile Arg Val Thr Thr Ile Gly Val Gly Asp Gly His
- 50 55 60
  Ala Cys Val Leu Ile Glu Glu Leu Thr Gly Ser Lys Ser Glu Asn Glu
  65 70 75 80
- Ser Gly Arg Leu Glu Pro Lys Ser Ile Thr Gly Pro Val Lys Glu Thr 85 90 95
- Val Ala Arg Val Lys Glu Thr Val Thr Lys Thr Glu Pro Leu Ile Cys 100 105 110
- Asp Asp Gly Val Thr Lys Arg Lys Leu Thr Met Tyr Tyr Glu Val Asp 115 120 125
- Val Asp Val Asp Gly Gly Arg Cys Val Asn Gly Asp Leu Thr Ala Val 130 135 140
- Ser Tyr Gly Gly Gly Leu Gly Asn Cys Gly Gly Asp Trp Xaa Gly Glu 145 150 155 160
- Met Gly Trp Ser Gly Glu Asp Glu Lys Trp

165

60

120

180

240

300

360

420

480

540

(2) INFORMATION FOR SEO ID NO:280: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 160 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..160 (D) OTHER INFORMATION: / Ceres Seq. ID 1481985 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:280: Met Ser Thr Leu Glu Ser Pro Leu Glu Ala Leu Ala Phe Glu Tyr Ala 10 Ser Phe Gly Val Phe Ala Val Val Asn Asn Val Trp Thr Trp Ile Ala Val Val Thr Ala Ala Val Ser Phe Trp Arg Ile Arg Val Thr Thr Ile 40 Gly Val Gly Asp Gly His Ala Cys Val Leu Ile Glu Glu Leu Thr Gly Ser Lys Ser Glu Asn Glu Ser Gly Arg Leu Glu Pro Lys Ser Ile Thr 70 Gly Pro Val Lys Glu Thr Val Ala Arg Val Lys Glu Thr Val Thr Lys 85 Thr Glu Pro Leu Ile Cys Asp Asp Gly Val Thr Lys Arg Lys Leu Thr 100 Met Tyr Tyr Glu Val Asp Val Asp Val Asp Gly Gly Arg Cys Val Asn 115 120 Gly Asp Leu Thr Ala Val Ser Tyr Gly Gly Gly Leu Gly Asn Cys Gly 135 Gly Asp Trp Xaa Gly Glu Met Gly Trp Ser Gly Glu Asp Glu Lys Trp 150 155 (2) INFORMATION FOR SEQ ID NO:281: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 598 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..598 (D) OTHER INFORMATION: / Ceres Seq. ID 1481986 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:281: gaaaaggagc ccttcttcaa aattgggtca tgtactcatg cttcttcttc ttcttagctt cctattgcac cataccgaat ctactttgcc tcctgatcat gaacaactct caataaatgg gaggagaatt atggcgtatt acaagcacga tggtgccata gcagcaccac catcaagaag tggacgaggt ggtggtcacg ggaagaggat gatgccctac cataagccaa atgctcctat acaaacacca ccatcaagaa gtagacgacg tgagggtggt cacaacggga gtagacagat

gggtatatat aggccaaatg gagacatata tacaggacca tcaaatagtg gacatggtgg

tggtcacatt catcaaaatt catctcctta gttttggggc aatttacaaa attggaaact

tatctaaaaa ttcgccaaaa agattataga tttgaatgta atttgtgttt catgtgattc

caagtatgga gtggatatgg tggtggtcac attcatcaac atttcgatct ccttagtttt

ataygatatg aatgtaattg tattttatgt tattccaagt aaggatatat aaagtcgc

170

(i) SEQUENCE CHARACTERISTICS:

(2) INFORMATION FOR SEQ ID NO:282:

- (A) LENGTH: 129 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..129
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481987
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:
- Lys Arg Ser Pro Ser Ser Lys Leu Gly His Val Leu Met Leu Leu Leu 1 5 10 15
- Leu Leu Ser Phe Leu Leu His His Thr Glu Ser Thr Leu Pro Pro Asp 20 25 30
- His Glu Gln Leu Ser Ile Asn Gly Arg Ile Met Ala Tyr Tyr Lys 35 40 45
- His Asp Gly Ala Ile Ala Ala Pro Pro Ser Arg Ser Gly Arg Gly Gly 50 60
- Gly His Gly Lys Arg Met Met Pro Tyr His Lys Pro Asn Ala Pro Ile 65 70 75 80
- Gln Thr Pro Pro Ser Arg Ser Arg Arg Glu Gly Gly His Asn Gly
  85 90 95
- Ser Arg Gln Met Gly Ile Tyr Arg Pro Asn Gly Asp Ile Tyr Thr Gly
  100 105 110
- Pro Ser Asn Ser Gly His Gly Gly His Ile His Gln Asn Ser Ser 115 120 125

Pro

- (2) INFORMATION FOR SEQ ID NO:283:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 117 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..117
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481988
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:
- Met Leu Leu Leu Leu Ser Phe Leu Leu His His Thr Glu Ser Thr
- Leu Pro Pro Asp His Glu Gln Leu Ser Ile Asn Gly Arg Arg Ile Met
  20 25 30
- Ala Tyr Tyr Lys His Asp Gly Ala Ile Ala Ala Pro Pro Ser Arg Ser 35 40 45
- Gly Arg Gly Gly Gly His Gly Lys Arg Met Met Pro Tyr His Lys Pro 50 55 60
- Asn Ala Pro Ile Gln Thr Pro Pro Ser Arg Ser Arg Arg Arg Glu Gly
- Gly His Asn Gly Ser Arg Gln Met Gly Ile Tyr Arg Pro Asn Gly Asp 85 90 95
- Ile Tyr Thr Gly Pro Ser Asn Ser Gly His Gly Gly His Ile His 100 105 110
- Gln Asn Ser Ser Pro

115

- (2) INFORMATION FOR SEQ ID NO:284:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 86 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..86
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481989
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

Met Ala Tyr Tyr Lys His Asp Gly Ala Ile Ala Ala Pro Pro Ser Arg
1 10 15

Ser Gly Arg Gly Gly His Gly Lys Arg Met Met Pro Tyr His Lys 20 25 30

Pro Asn Ala Pro Ile Gln Thr Pro Pro Ser Arg Ser Arg Arg Arg Glu 35 40 45

Gly Gly His Asn Gly Ser Arg Gln Met Gly Ile Tyr Arg Pro Asn Gly 50 60

Asp Ile Tyr Thr Gly Pro Ser Asn Ser Gly His Gly Gly His Ile 65 70 75 80

His Gln Asn Ser Ser Pro

85

- (2) INFORMATION FOR SEQ ID NO:285:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 688 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..688
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481990
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:285: gtggtattac cgaacttaaa cctcgtcgtc gagcttcgaa actctttttc tcagttcacc 60 tggaaaacga tgcgtcgtca caagcagacg ccatgagagc ttgcaggagt ctctggagaa 120 atttggagat ttagatgaac tccaatctat ctgctgatga taatgataag gatttggaat 180 aactataagg gtaaatacag attcttcctc tcaaattgcc gctctttctc gtcaatcaaa 240 cgaccccaaa tcccagaaag cgaagagact agcctctcga tcacacaacg aagattcgac 300 ccagatttag ctcctatcaa gactagagtt tacgtctctc tcttccatac tctctttcgg 360 ctctatttaa gctgtgagag actctacgga gcagcaagga cgctctctgc gatgtgcact 420 ttcggggttg ttccggattc gcgtctatgg aacagtctga ttcatcaatt caatgtcaat 480 ggtttggtac acgatcaggt atcgctgatt tacagcaaga tgatagcttg tggagtttct 540 cccgatgttt ttgctctcaa tgtattgatt cattctttt gcaaagtggg tcgtttgagt 600 tttgcaatta gtttacttag aaatagagta atcagcatcg atactgttac ttataacact 660 gtgatttcgg gtttatgtga acatggct
- (2) INFORMATION FOR SEQ ID NO:286:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 177 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..177
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481991

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

Met Ile Met Ile Arg Ile Trp Asn Asn Tyr Lys Gly Lys Tyr Arg Phe

Gly

Phe Leu Ser Asn Cys Arg Ser Phe Ser Ser Ile Lys Arg Pro Gln Ile Pro Glu Ser Glu Glu Thr Ser Leu Ser Ile Thr Gln Arg Arg Phe Asp 40 Pro Asp Leu Ala Pro Ile Lys Thr Arg Val Tyr Val Ser Leu Phe His Thr Leu Phe Arg Leu Tyr Leu Ser Cys Glu Arg Leu Tyr Gly Ala Ala 70 Arg Thr Leu Ser Ala Met Cys Thr Phe Gly Val Val Pro Asp Ser Arg 90 85 Leu Trp Asn Ser Leu Ile His Gln Phe Asn Val Asn Gly Leu Val His 105 Asp Gln Val Ser Leu Ile Tyr Ser Lys Met Ile Ala Cys Gly Val Ser 120 Pro Asp Val Phe Ala Leu Asn Val Leu Ile His Ser Phe Cys Lys Val 140 135 Gly Arg Leu Ser Phe Ala Ile Ser Leu Leu Arg Asn Arg Val Ile Ser 155 150 Ile Asp Thr Val Thr Tyr Asn Thr Val Ile Ser Gly Leu Cys Glu His 165 170

- (2) INFORMATION FOR SEQ ID NO:287:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 175 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..175
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481992
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:
- Met Ile Arg Ile Trp Asn Asn Tyr Lys Gly Lys Tyr Arg Phe Phe Leu 10 Ser Asn Cys Arg Ser Phe Ser Ser Ile Lys Arg Pro Gln Ile Pro Glu
- 25
- Ser Glu Glu Thr Ser Leu Ser Ile Thr Gln Arg Arg Phe Asp Pro Asp
- Leu Ala Pro Ile Lys Thr Arg Val Tyr Val Ser Leu Phe His Thr Leu 55
- Phe Arg Leu Tyr Leu Ser Cys Glu Arg Leu Tyr Gly Ala Ala Arg Thr 70
- Leu Ser Ala Met Cys Thr Phe Gly Val Val Pro Asp Ser Arg Leu Trp 90 85 Asn Ser Leu Ile His Gln Phe Asn Val Asn Gly Leu Val His Asp Gln
- 105 Val Ser Leu Ile Tyr Ser Lys Met Ile Ala Cys Gly Val Ser Pro Asp
- 120 125 Val Phe Ala Leu Asn Val Leu Ile His Ser Phe Cys Lys Val Gly Arg
- 140 135 Leu Ser Phe Ala Ile Ser Leu Leu Arg Asn Arg Val Ile Ser Ile Asp 155
- Thr Val Thr Tyr Asn Thr Val Ile Ser Gly Leu Cys Glu His Gly 170 165
- (2) INFORMATION FOR SEQ ID NO:288:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids

150

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..92
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1481993
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

Met Cys Thr Phe Gly Val Val Pro Asp Ser Arg Leu Trp Asn Ser Leu 1 5 10 15

Ile His Gln Phe Asn Val Asn Gly Leu Val His Asp Gln Val Ser Leu
20 25 30

Ile Tyr Ser Lys Met Ile Ala Cys Gly Val Ser Pro Asp Val Phe Ala 35 40 45

Leu Asn Val Leu Ile His Ser Phe Cys Lys Val Gly Arg Leu Ser Phe 50 55 60

Ala Ile Ser Leu Leu Arg Asn Arg Val Ile Ser Ile Asp Thr Val Thr 65 .70 .75 .80

Tyr Asn Thr Val Ile Ser Gly Leu Cys Glu His Gly
85

- (2) INFORMATION FOR SEQ ID NO:289:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 499 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..499
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481994
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

attgtaactt gtaaccagtg teggetaatt tegaettttg tagatetttt tetgetettt ctctctctct ctgctctctc tctctctct tctctcttgt attatttcta tctccccqc 120 cgtcgaaaga gaaacgtcga tcggagaacc tttgaaatgt cgactggatt agatatgtct 180 ctcgacgaca tgatcgccaa gaaccgtaag tctcgtggtg gagccggccc cgctcgtgga 240 accggatccg gatccggacc gggtccgact cgccqcaaca accctaatcq qaaatcaacc 300 cgatctgctc cataccaatc agccaaggcg ccggagtcca cctggggtca cgacatgttc 360 tccgatagat ctgaagatca ccgatcggga cgttcctccg ccggaatcga aactggaacc 420 aagctctaca tttccaattt ggayttacgg tgtcatgaac gaagacatca aggaactgtt 480 tgctgaagtt ggagaactt

- (2) INFORMATION FOR SEQ ID NO:290:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 161 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..161
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481995
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

Ile Val Thr Cys Asn Gln Cys Arg Leu Ile Ser Thr Phe Val Asp Leu
1 10 15

Phe Leu Leu Phe Leu Ser Leu Ser Ala Leu Ser Leu Ser Leu Ser Leu 20 25 30

Leu Tyr Tyr Phe Tyr Leu Pro Arg Arg Arg Lys Arg Asn Val Asp Arg

45 35 40 Arg Thr Phe Glu Met Ser Thr Gly Leu Asp Met Ser Leu Asp Asp Met 55 Ile Ala Lys Asn Arg Lys Ser Arg Gly Gly Ala Gly Pro Ala Arg Gly 75 Thr Gly Ser Gly Ser Gly Pro Gly Pro Thr Arg Arg Asn Asn Pro Asn 90 Arg Lys Ser Thr Arg Ser Ala Pro Tyr Gln Ser Ala Lys Ala Pro Glu 105 Ser Thr Trp Gly His Asp Met Phe Ser Asp Arg Ser Glu Asp His Arg 120 Ser Gly Arg Ser Ser Ala Gly Ile Glu Thr Gly Thr Lys Leu Tyr Ile 135 Ser Asn Leu Xaa Leu Arg Cys His Glu Arg Arg His Gln Gly Thr Val 155 150 Cys

- (2) INFORMATION FOR SEQ ID NO:291:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 109 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..109
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481996
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

Met Ser Thr Gly Leu Asp Met Ser Leu Asp Asp Met Ile Ala Lys Asn 1 5 10 15

Arg Lys Ser Arg Gly Gly Ala Gly Pro Ala Arg Gly Thr Gly Ser Gly
20 25 30

Ser Gly Pro Gly Pro Thr Arg Arg Asn Asn Pro Asn Arg Lys Ser Thr 35 40 45

Arg Ser Ala Pro Tyr Gln Ser Ala Lys Ala Pro Glu Ser Thr Trp Gly
50 55 60

His Asp Met Phe Ser Asp Arg Ser Glu Asp His Arg Ser Gly Arg Ser 65 70 75 80

Ser Ala Gly Ile Glu Thr Gly Thr Lys Leu Tyr Ile Ser Asn Leu Xaa 85 90 95

Leu Arg Cys His Glu Arg Arg His Gln Gly Thr Val Cys 100 105

- (2) INFORMATION FOR SEQ ID NO:292:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 103 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..103
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1481997
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:
- Met Ser Leu Asp Asp Met Ile Ala Lys Asn Arg Lys Ser Arg Gly Gly

  1 10 15
- Ala Gly Pro Ala Arg Gly Thr Gly Ser Gly Ser Gly Pro Gly Pro Thr

Arg Arg Asn Asn Pro Asn Arg Lys Ser Thr Arg Ser Ala Pro Tyr Gln 35 40 45 Ser Ala Lys Ala Pro Glu Ser Thr Trp Gly His Asp Met Phe Ser Asp

50 55 60
Arg Ser Glu Asp His Arg Ser Gly Arg Ser Ser Ala Gly Ile Glu Thr
65 70 75 80

Gly Thr Lys Leu Tyr Ile Ser Asn Leu Xaa Leu Arg Cys His Glu Arg
85
90
95

Arg His Gln Gly Thr Val Cys
100

- (2) INFORMATION FOR SEQ ID NO:293:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 851 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..851
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482009
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:293: 60 agagagaatc gcattaacaa aaaaacaaac gaatcttttg agtttaaaac cctttttcac ttaccggaga aatggagaga tcgacgccgg aacatgtctc ctccgcacac aagcgcataa 120 gcgtgagctt cctcgtgtct ctcatggtac tttgtgctag acacgcaagc agagtttcca 180 agaagcttaa acccaagaag actcggaagc aaactcatct tgaagactat ctcgaaagcc 240 ctaagtctaa cggaaacggt agcgaagacg gtagaggagg aggaaggttt ggatggagtc 300 360 cggcaaggac tttttctcct atgagggtgc gtcctaagga gctctacacg accttgagca acaaggcgat gactatggtt ggccggaaaa acaaagctta cgacggtggt ccgacgaaga 420 agacggcggt ggagatggtg atggaggagg atgaggaaga gtacggcgtt tggcagaggg 480 540 agattttgat gggaggaaaa tgtgagccgt tggattactc aggcgtgatc tactacgatt 600 gtagtggaca tcagctaaaa caagtgcctc caaggtctcc acgtgccagt ttggttccgg agcgcccgac tcgttcttat gtcgggtcat tgttaaaccc gacgggaaag gaaatttaaa 660 ttttagtttg agaatttgaa attttagtat gagtatttga ttgttgtttg aggtgtcatc 720 acgtaagtgg taaattotot aggagotttg ttggtccctt gtcattagta gatgcatgac 780 840 atgtttttat gcatattgtt gtgtagttta tgtatttaag acgtttggca attttaaaac tttagtagtt t
- (2) INFORMATION FOR SEQ ID NO:294:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 195 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..195
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482010
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:
- Met Glu Arg Ser Thr Pro Glu His Val Ser Ser Ala His Lys Arg Ile
  1 5 10 15
- Ser Val Ser Phe Leu Val Ser Leu Met Val Leu Cys Ala Arg His Ala 20 25 30
  Ser Arg Val Ser Lys Lys Leu Lys Pro Lys Lys Thr Arg Lys Gln Thr
- 35 40 45 His Leu Glu Asp Tyr Leu Glu Ser Pro Lys Ser Asn Gly Asn Gly Ser
- 50 55 60
  Glu Asp Gly Arg Gly Gly Gly Arg Phe Gly Trp Ser Pro Ala Arg Thr
  65 70 75 80

Phe Ser Pro Met Arg Val Arg Pro Lys Glu Leu Tyr Thr Thr Leu Ser 90 Asn Lys Ala Met Thr Met Val Gly Arg Lys Asn Lys Ala Tyr Asp Gly 105 Gly Pro Thr Lys Lys Thr Ala Val Glu Met Val Met Glu Glu Asp Glu 120 Glu Glu Tyr Gly Val Trp Gln Arq Glu Ile Leu Met Gly Gly Lys Cys 135 Glu Pro Leu Asp Tyr Ser Gly Val Ile Tyr Tyr Asp Cys Ser Gly His 150 155 Gln Leu Lys Gln Val Pro Pro Arg Ser Pro Arg Ala Ser Leu Val Pro 165 170 Glu Arg Pro Thr Arg Ser Tyr Val Gly Ser Leu Leu Asn Pro Thr Gly 185 Lys Glu Ile 195 (2) INFORMATION FOR SEQ ID NO:295: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 171 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..171 (D) OTHER INFORMATION: / Ceres Seq. ID 1482011 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:295: Met Val Leu Cys Ala Arg His Ala Ser Arg Val Ser Lys Lys Leu Lys 10 Pro Lys Lys Thr Arg Lys Gln Thr His Leu Glu Asp Tyr Leu Glu Ser 25 Pro Lys Ser Asn Gly Asn Gly Ser Glu Asp Gly Arg Gly Gly Arg 40 Phe Gly Trp Ser Pro Ala Arg Thr Phe Ser Pro Met Arg Val Arg Pro 5.5 Lys Glu Leu Tyr Thr Thr Leu Ser Asn Lys Ala Met Thr Met Val Gly 70 75

Arg Lys Asn Lys Ala Tyr Asp Gly Gly Pro Thr Lys Lys Thr Ala Val 85 90 Glu Met Val Met Glu Glu Asp Glu Glu Glu Tyr Gly Val Trp Gln Arg 105 Glu Ile Leu Met Gly Gly Lys Cys Glu Pro Leu Asp Tyr Ser Gly Val 115 120 125 Ile Tyr Tyr Asp Cys Ser Gly His Gln Leu Lys Gln Val Pro Pro Arg 135 140 Ser Pro Arg Ala Ser Leu Val Pro Glu Arg Pro Thr Arg Ser Tyr Val 150 155 Gly Ser Leu Leu Asn Pro Thr Gly Lys Glu Ile 165

- (2) INFORMATION FOR SEQ ID NO:296:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 112 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

(B) LOCATION: 1..112

(D) OTHER INFORMATION: / Ceres Seq. ID 1482012

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

Met Arg Val Arg Pro Lys Glu Leu Tyr Thr Thr Leu Ser Asn Lys Ala

1 5 10 15

Met Thr Met Val Gly Arg Lys Asn Lys Ala Tyr Asp Gly Gly Pro Thr

20 25 30

Lys Lys Thr Ala Val Glu Met Val Met Glu Glu Asp Glu Glu Glu Tyr
35 40 45

Gly Val Trp Gln Arg Glu Ile Leu Met Gly Gly Lys Cys Glu Pro Leu
50 55 60

Asp Tyr Ser Gly Val Ile Tyr Tyr Asp Cys Ser Gly His Gln Leu Lys

70

75

80

Gln Val Pro Pro Arg Ser Pro Arg Ala Ser Leu Val Pro Glu Arg Pro
85 90 95
The Arg Ser Tur Val Cly Ser Leu Arg Pro The Cly Ive Glu Ile

Thr Arg Ser Tyr Val Gly Ser Leu Leu Asn Pro Thr Gly Lys Glu Ile 100 105 110

#### (2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 576 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..576
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482013
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:297: agatttgcat tcgcagggga taaggatcaa aaatggagga agcaaaggga cctgtgaagc 120 acgtattgct tgctagtttc aaagatgggg ttagtcctga gaaaatcgaa gagctcatca aaggttacgc caatctcgtc aatctcatcg aacctatgaa agctttccac tggggaaaag 180 atgtgagcat tgagaatctg catcaaggtt acacacacat ctttgaatcc acatttgaga 240 300 gtaaagaagc tgttgcagag tacattgctc atcctgctca cgttaaattc gccaccatct tccttggcag cttggataaa gttttggtta ttgactacaa gcctacctct gtctctct 360 420 aattatcttg tagcagcatt ttcatcattg atctttttct cgggtatgca tcttgtatgt tgaataaagt atattccttt tgagttttcc tgcattgttc tcatgtttct ctgtgaattt 480 540 ctctcttttt tgtttgtttg tttgtttcct tctgttgtat tatacttgat ctgtaaaaag atcatgagtt tattaagagt gtttgatttc agactc
- (2) INFORMATION FOR SEQ ID NO:298:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 109 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..109
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482014
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

Met Glu Glu Ala Lys Gly Pro Val Lys His Val Leu Leu Ala Ser Phe 1 5 10 15 Lys Asp Gly Val Ser Pro Glu Lys Ile Glu Glu Leu Ile Lys Gly Tyr

Lys Asp Gly Val Ser Pro Glu Lys IIe Glu Glu Leu IIe Lys Gly Tyr 20 25 30

Ala Asn Leu Val Asn Leu Ile Glu Pro Met Lys Ala Phe His Trp Gly 35 40 45

Lys Asp Val Ser Ile Glu Asn Leu His Gln Gly Tyr Thr His Ile Phe 50 55 60 60 Glu Ser Thr Phe Glu Ser Lys Glu Ala Val Ala Glu Tyr Ile Ala His 65 70 75 80 Pro Ala His Val Lys Phe Ala Thr Ile Phe Leu Gly Ser Leu Asp Lys

Pro Ala His Val Lys Phe Ala Thr Ile Phe Leu Gly Ser Leu Asp Lys 85 90 95

Val Leu Val Ile Asp Tyr Lys Pro Thr Ser Val Ser Leu 100 105

- (2) INFORMATION FOR SEQ ID NO:299:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 68 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..68
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482015
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

Met Lys Ala Phe His Trp Gly Lys Asp Val Ser Ile Glu Asn Leu His 1 10 15

Gln Gly Tyr Thr His Ile Phe Glu Ser Thr Phe Glu Ser Lys Glu Ala 20 25 30

Val Ala Glu Tyr Ile Ala His Pro Ala His Val Lys Phe Ala Thr Ile  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Phe Leu Gly Ser Leu Asp Lys Val Leu Val Ile Asp Tyr Lys Pro Thr 50 55 60

Ser Val Ser Leu

65

- (2) INFORMATION FOR SEQ ID NO:300:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 664 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..664
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482016
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

60 gattaatttt tgagagagct gtctctcttg acagagattt tggaaggtaa gagagacgat 120 gacgtatcac gtttttagac gagactatgg cgatggagag tgaattttgc ctttttggaa 180 ttcccacgac tctctgtatc tttctttagg cgagactatg gcgataaaga ttgaattttg cttcgacaat tgagggtgaa attaacggca aattcaaaat tgcggtttct gacaagtcgt 240 300 tccgctggat tcgtcagctt tctcaccatc ggcgaagcga ggttcaccta atcggagatt tgcgactccc agttggagag taatcgttga ggagaggcaa cgagtgacac gagcatatca 360 420 cttctctcgc cattcttcgt acccatcgca agctaggtct cgtcactaag ctcatgagtg 480 ccqctcaggc tqctatggaa cagcttaaag gtatgataaa cgacatggat cgtgtccaac tggaatgagg actcttgtgt gttacaccta tcgtcaatgc ccaactgata tgttgtgtct 540 tataaccata aatttacttt gatccaaaca cttttgagaa gctgtcttca agtggtcaaa 600 aggtagcaac totttttct tgtgtaattg taatcatotg tgttatgaag tattgccatt 660 ttcg

- (2) INFORMATION FOR SEQ ID NO:301:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 958 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single

(D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..958
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482021
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:301: aaagccctaa aaatcagaga ttccattttc tcttatctct ctctctctct ctttctcttt

60 ttccgattct gattctattt tttcttcacc aaccacacaa aacaattcta cgtttgatct 120 cttcttcttt ctccgtccaa attaatctct acgtttaatt tctcttgttc aatcatggga 180 cacgaaacaa tgacgccggc aacaacaacg ctcgtgttca cgtacggaac tctaaagaga 240 ggattctcaa atcatgtcct gatgcaagat ctgatccgat ctggtgacgc ttctttcaaa 300 ggtgtttacc aaactctaga caaatatcct ctcgtctgtg gaccttaccg agtccctttc 360 ctcctcaaca aacctggatc gggctatcac gtcaccggcg agctttacgc ggtttctcct 420 cgcggtctct ctcgtctcga tgagcttgaa ggaatcagtc gcggtcatta catccggcaa 480 ccgatacgtt ctcgcggcgg cggaggaaga agaagaagaa ggagatctgg aaacagaggc 540 gccgtcgtcg tgcgtggtgg aggcgtatta cgctcataag agttatgagg aagagctgtg 600 gaagaggaat agaggaagat cattcggcgc gtacacggaa aacgaagcgc gtggatatgt 660 gaaacgcaat gataggcctc agcatcttag cttcttggat catatccgta ttttcgtatc 720 ttctccatgt gattgatttt tatttctttc gtggtctctc ccgctcgtcg cttttctatg 780 tttgtttgtt tttttctcgg gacaaaagaa acaaaaaaaa aacacaaaca caaactagtt 840 ttacaacttg taagggtccc accagtccgt ccgtccgtcg tctccgtatc gatttgatta 900

- (2) INFORMATION FOR SEQ ID NO:302:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 134 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..134
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482022
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:
- Met Gly His Glu Thr Met Thr Pro Ala Thr Thr Thr Leu Val Phe Thr 10

gagagattgt tgggtgtaaa acttatgatt cccatcttaa ataagtttta ggttgttt

- Tyr Gly Thr Leu Lys Arg Gly Phe Ser Asn His Val Leu Met Gln Asp 25
- Leu Ile Arg Ser Gly Asp Ala Ser Phe Lys Gly Val Tyr Gln Thr Leu 40 45
- Asp Lys Tyr Pro Leu Val Cys Gly Pro Tyr Arg Val Pro Phe Leu Leu 55
- Asn Lys Pro Gly Ser Gly Tyr His Val Thr Gly Glu Leu Tyr Ala Val 70 75
- Ser Pro Arg Gly Leu Ser Arg Leu Asp Glu Leu Glu Gly Ile Ser Arg 85 90
- Gly His Tyr Ile Arg Gln Pro Ile Arg Ser Arg Gly Gly Gly Arg 100 105
- Arg Arg Arg Arg Ser Gly Asn Arg Gly Ala Val Val Arg Gly 115 120
- Gly Gly Val Leu Arg Ser 130
- (2) INFORMATION FOR SEQ ID NO:303:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 129 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..129
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482023

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

Met Thr Pro Ala Thr Thr Leu Val Phe Thr Tyr Gly Thr Leu Lys  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Arg Gly Phe Ser Asn His Val Leu Met Gln Asp Leu Ile Arg Ser Gly 20 25 30

Asp Ala Ser Phe Lys Gly Val Tyr Gln Thr Leu Asp Lys Tyr Pro Leu 35 40 45

Val Cys Gly Pro Tyr Arg Val Pro Phe Leu Leu Asn Lys Pro Gly Ser 50 55 60

Gly Tyr His Val Thr Gly Glu Leu Tyr Ala Val Ser Pro Arg Gly Leu 65 70 75 80

Ser Arg Leu Asp Glu Leu Glu Gly Ile Ser Arg Gly His Tyr Ile Arg 85 90 95

Gln Pro Ile Arg Ser Arg Gly Gly Gly Gly Arg Arg Arg Arg Arg 100 105 110

Ser Gly Asn Arg Gly Ala Val Val Arg Gly Gly Val Leu Arg 115 120 125

Ser

- (2) INFORMATION FOR SEQ ID NO:304:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 105 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..105
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482024
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

Met Gln Asp Leu Ile Arg Ser Gly Asp Ala Ser Phe Lys Gly Val Tyr
1 5 10 15

Gln Thr Leu Asp Lys Tyr Pro Leu Val Cys Gly Pro Tyr Arg Val Pro 20 25 30

Phe Leu Leu Asn Lys Pro Gly Ser Gly Tyr His Val Thr Gly Glu Leu 35 40 45

Tyr Ala Val Ser Pro Arg Gly Leu Ser Arg Leu Asp Glu Leu Glu Gly
50 55 60

Ile Ser Arg Gly His Tyr Ile Arg Gln Pro Ile Arg Ser Arg Gly Gly
65 70 75 80

Gly Gly Arg Arg Arg Arg Arg Ser Gly Asn Arg Gly Ala Val 85 90 95

Val Arg Gly Gly Gly Val Leu Arg Ser 100 105

(2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 535 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -

- (B) LOCATION: 1..535
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482029
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

atcatactct ctcaacttca tctctctct tctctcaatc tcttaaqatc ccacaaqtca 60 cttttcttct tcttaatcac ctttaatggc gaatttgatc cttaagcaat ctctaatcat 120 actectaate atatatteaa caccaatett qaqtteteaa qeteqaatee teeqtacata 180 tcgccccaca accatgggcg atatggatag tcaggttctc ctacgtgaac tcgggattga 240 tctctctaag ttcaaaggtc aagacgagag acggttttta gtggattccg aaagggtttc 300 tccggggggt cctgatccac aacaccattg actgatcttt accgatatat atatacttta 360 ccgaagatcg aagcacacat ataactgtga ctgatccatg caagtcaatt taaatatcgt 420 catttacatg cttttcttdt ctttttcata aatcttccct acacttttgt tgtatcaaga 480 ttttggtatt ctttwgtacc ttccttatct ttaaacatca aggttttact cchtt

- (2) INFORMATION FOR SEQ ID NO:306:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 81 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..81
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482030
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

Met Ala Asn Leu Ile Leu Lys Gln Ser Leu Ile Ile Leu Leu Ile Ile 1 10 15

Tyr Ser Thr Pro Ile Leu Ser Ser Gln Ala Arg Ile Leu Arg Thr Tyr
20 25 30

Arg Pro Thr Thr Met Gly Asp Met Asp Ser Gln Val Leu Leu Arg Glu 35 40 45

Leu Gly Ile Asp Leu Ser Lys Phe Lys Gly Gln Asp Glu Arg Arg Phe 50 60

Leu Val Asp Ser Glu Arg Val Ser Pro Gly Gly Pro Asp Pro Gln His 65 70 75 80

- (2) INFORMATION FOR SEQ ID NO:307:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 45 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..45
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482031
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

Met Gly Asp Met Asp Ser Gln Val Leu Leu Arg Glu Leu Gly Ile Asp
1 10 15

Leu Ser Lys Phe Lys Gly Gln Asp Glu Arg Arg Phe Leu Val Asp Ser 20 25 30

Glu Arg Val Ser Pro Gly Gly Pro Asp Pro Gln His His
35 40 45

- (2) INFORMATION FOR SEQ ID NO:308:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 42 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..42
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482032
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

Met Asp Ser Gln Val Leu Leu Arg Glu Leu Gly Ile Asp Leu Ser Lys
1 10 15

Phe Lys Gly Gln Asp Glu Arg Arg Phe Leu Val Asp Ser Glu Arg Val 20 25 30

Ser Pro Gly Gly Pro Asp Pro Gln His His 35

- (2) INFORMATION FOR SEQ ID NO:309:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 903 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..903
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482033
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:309: aatgtcgcgt gcggccacta gatttttcct gacgcggtgt ctgctcccac ttcccctcct 60 120 ctccccagg tggcggcagc ggcggcgggg tagcatttgt gctacgaggg cttttgcaat 180 ggcggcttcg gggttcggcg gcggcgaggc gttccggctc tcggccgcac caggggccgg 240 cttactqaaq ctgcacaagg gcgacatcac cctctggtcc gtcgactgcg ccaccgacgc 300 catcqttaat qctqctaatq agcqaatgtt aggtggcgga ggtgttgatg gagctataca tcaagctgct ggaccagagc tagtgcaagc atgccggaaa gttccagagg tcaaaccagg 360 420 agttcgttgt cctactggag aagctaggat tactcctgct tttgagcttc ctgcctctcg ggtgattcac actgttggcc ctatatatga tttggacaag catcctgagg tgtcattaaa 480 gaaggcctat gaaaatagct tgaagcttgc taaagataat ggcattcagt acatcgcatt 540 600 ccctqctata tcttqtqqtq tttatcqtta tcctcccaaq qaaqcatcaa aaataqctqt ttctaccgca cagaaatttt cagagggtat caaagaggtg cattttgttc tgttctcgga 660 tgacctttac aatatatggc gcgagactgc ccagcagttg ctatcacagt ttgagaaatg 720 780 aatqqtccat aggcagtttg ctagcactag cagttgccca gcagtcgttg tctagtgttg agatgtgagc gccataggca gtttgcctgg tgtaataaaa atgggtgtat cagacaacgt 840 ttaaatcttg atgaaaccgt gtattgcacc tgtggtataa tgctgaatga gtaaagtttg 900
- (2) INFORMATION FOR SEQ ID NO:310:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 239 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..239
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482034
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

Met Ser Arg Ala Ala Thr Arg Phe Phe Leu Thr Arg Cys Leu Leu Pro 1 5 10 15

Leu Pro Leu Leu Ser Pro Arg Trp Arg Gln Arg Arg Arg Gly Ser Ile 20 25 30

Cys Ala Thr Arg Ala Phe Ala Met Ala Ala Ser Gly Phe Gly Gly 35 40 45

Glu Ala Phe Arg Leu Ser Ala Ala Pro Gly Ala Gly Leu Leu Lys Leu His Lys Gly Asp Ile Thr Leu Trp Ser Val Asp Cys Ala Thr Asp Ala 7.0 Ile Val Asn Ala Ala Asn Glu Arg Met Leu Gly Gly Gly Val Asp 90 Gly Ala Ile His Gln Ala Ala Gly Pro Glu Leu Val Gln Ala Cys Arg 105 100 Lys Val Pro Glu Val Lys Pro Gly Val Arg Cys Pro Thr Gly Glu Ala 120 Arg Ile Thr Pro Ala Phe Glu Leu Pro Ala Ser Arg Val Ile His Thr 135 140 Val Gly Pro Ile Tyr Asp Leu Asp Lys His Pro Glu Val Ser Leu Lys 150 155 Lys Ala Tyr Glu Asn Ser Leu Lys Leu Ala Lys Asp Asn Gly Ile Gln 170 Tyr Ile Ala Phe Pro Ala Ile Ser Cys Gly Val Tyr Arg Tyr Pro Pro 185 Lys Glu Ala Ser Lys Ile Ala Val Ser Thr Ala Gln Lys Phe Ser Glu 200 Gly Ile Lys Glu Val His Phe Val Leu Phe Ser Asp Asp Leu Tyr Asn 215 220 Ile Trp Arg Glu Thr Ala Gln Gln Leu Leu Ser Gln Phe Glu Lys

- (2) INFORMATION FOR SEQ ID NO:311:
  - (i) SEQUENCE CHARACTERISTICS:

230

- (A) LENGTH: 239 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..239
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482035
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

Met Ser Arg Ala Ala Thr Arg Phe Phe Leu Thr Arg Cys Leu Leu Pro

1 5 10 15

Leu Pro Leu Leu Ser Pro Arg Trp Arg Gln Arg Arg Gly Ser Ile

20 25 30

Cys Ala Thr Arg Ala Phe Ala Met Ala Ala Ser Gly Phe Gly Gly

35 40 45
Glu Ala Phe Arg Leu Ser Ala Ala Pro Gly Ala Gly Leu Leu Lys Leu

50 55 60

His Lys Gly Asp Ile Thr Leu Trp Ser Val Asp Cys Ala Thr Asp Ala

65 70 75 80

Ile Val Asn Ala Ala Asn Glu Arg Met Leu Gly Gly Gly Val Asp

85 90 95
Gly Ala Ile His Gln Ala Ala Gly Pro Glu Leu Val Gln Ala Cys Arg

Gly Ala Ile His Gln Ala Ala Gly Pro Glu Leu Val Gln Ala Cys Arg 100 105 110

Lys Val Pro Glu Val Lys Pro Gly Val Arg Cys Pro Thr Gly Glu Ala 115 120 125

Arg Ile Thr Pro Ala Phe Glu Leu Pro Ala Ser Arg Val Ile His Thr

130 135 140

Val Gly Pro Ile Tyr Asp Leu Asp Lys His Pro Glu Val Ser Leu Lys 145 150 155 160

Lys Ala Tyr Glu Asn Ser Leu Lys Leu Ala Lys Asp Asn Gly Ile Gln
165 170 175

Tyr Ile Ala Phe Pro Ala Ile Ser Cys Gly Val Tyr Arg Tyr Pro Pro

180 185 190
Lys Glu Ala Ser Lys Ile Ala Val Ser Thr Ala Gln Lys Phe Ser Glu

195 200 205
Gly Ile Lys Glu Val His Phe Val Leu Phe Ser Asp Asp Leu Tyr Asn

210 215 220

Ile Trp Arg Glu Thr Ala Gln Gln Leu Leu Ser Gln Phe Glu Lys
225 230 235

- (2) INFORMATION FOR SEQ ID NO:312:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 200 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..200
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482036
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

Met Ala Ala Ser Gly Phe Gly Gly Gly Glu Ala Phe Arg Leu Ser Ala 1 10 15

Ala Pro Gly Ala Gly Leu Leu Lys Leu His Lys Gly Asp Ile Thr Leu
20 25 30

Trp Ser Val Asp Cys Ala Thr Asp Ala Ile Val Asn Ala Ala Asn Glu

Arg Met Leu Gly Gly Gly Val Asp Gly Ala Ile His Gln Ala Ala 50 60

Gly Pro Glu Leu Val Gln Ala Cys Arg Lys Val Pro Glu Val Lys Pro 65 70 75 80

Gly Val Arg Cys Pro Thr Gly Glu Ala Arg Ile Thr Pro Ala Phe Glu 85 90 95

Leu Pro Ala Ser Arg Val Ile His Thr Val Gly Pro Ile Tyr Asp Leu 100 105 110

Asp Lys His Pro Glu Val Ser Leu Lys Lys Ala Tyr Glu Asn Ser Leu 115 120 125

Lys Leu Ala Lys Asp Asn Gly Ile Gln Tyr Ile Ala Phe Pro Ala Ile 130 135 140

Ser Cys Gly Val Tyr Arg Tyr Pro Pro Lys Glu Ala Ser Lys Ile Ala 145 150 155 160

Val Ser Thr Ala Gln Lys Phe Ser Glu Gly Ile Lys Glu Val His Phe 165 170 175

Val Leu Phe Ser Asp Asp Leu Tyr Asn Ile Trp Arg Glu Thr Ala Gln
180 185 190

Gln Leu Leu Ser Gln Phe Glu Lys 195 200

- (2) INFORMATION FOR SEQ ID NO:313:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 806 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..806
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482041
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

aatttgcagc ttgttcccca cgagcttcct ctgttcatca tcgtcctcga gcttcctctg ttcatcaagc tcctctgttc ttgaacatcg acgaaatcag aggctgtggc agatgcgaac

180 aaagcaattg agttggatca ttcattaatc aaagcttacc taagaaaagg gttacaactc 240 aagtgttttg agaaagaaga tggctaaaga tgtaagtgtt ttggttttta ttttagagtt 300 ttggtcaatc agtttgctaa tgagtggcta ggttgagcat aaacgtgctt aacctttgat 360 ataacctcag tcaaqcatqa agaqqaqcta qctqaqqtaa atatgaatgt ctttgtggta ggctaaatat agccattgga tgtattcatt ttgtgtttgt aatatttagg ttggttaacc 420 aaattqqtqq cttctaacat qqttatattq aatatgcagc ctcaagaaat tgtggcagtg 480 aaaqattqac atqttttqtt tqtcttatqt qctatttatq caqctcqqaq atagatttat 540 ctatgaagtt gtggatgaag tgaataactt ccctcacttc tatggtccta tcaaaacctt 600 660 cqttcctctt cctttqqatt atqttqtcaa aqttqagaag ttaacattca tcaattgcaa tttcacctgc agcttttttg acttgatgat tcagtggttt atgtgtaatt gcaatgtcac 720 tcttttaata atgtaattaa gagagatttg ttttctattc acaaaacagt gtatttatac 780

(2) INFORMATION FOR SEQ ID NO:314:

tattattaca atgcaagatt aagatc

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 48 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..48
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482042
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

 Ile Cys
 Ser Leu Phe Pro Thr Ser Phe Leu Cys
 Ser Ser Ser Ser Ser Ser

 1
 5
 10
 15

 Ser Phe Leu Cys
 Ser Ser Ser Ser Ser Val Leu Glu His Arg Arg Asn 20
 25
 30

 Gln Arg Leu Trp Gln Met Arg Thr Lys Gln Leu Ser Trp Ile His 35
 40
 45

- (2) INFORMATION FOR SEQ ID NO:315:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 81 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..81
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482043
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

Met Phe Cys Leu Ser Tyr Val Leu Phe Met Gln Leu Gly Asp Arg Phe 1 5 10 15

Ile Tyr Glu Val Asp Glu Val Asn Asn Phe Pro His Phe Tyr Gly

Pro Ile Lys Thr Phe Val Pro Leu Pro Leu Asp Tyr Val Val Lys Val
35 40 45

Glu Lys Leu Thr Phe Ile Asn Cys Asn Phe Thr Cys Ser Phe Phe Asp 50 55 60

Leu Met Ile Gln Trp Phe Met Cys Asn Cys Asn Val Thr Leu Leu Ile 65 70 75 80 Met

- (2) INFORMATION FOR SEQ ID NO:316:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 72 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..72
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482044
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

Met Gln Leu Gly Asp Arg Phe Ile Tyr Glu Val Val Asp Glu Val Asn 1 5 10 15

Asn Phe Pro His Phe Tyr Gly Pro Ile Lys Thr Phe Val Pro Leu Pro 20 25 30

Leu Asp Tyr Val Val Lys Val Glu Lys Leu Thr Phe Ile Asn Cys Asn 35

Phe Thr Cys Ser Phe Phe Asp Leu Met Ile Gln Trp Phe Met Cys Asn 50 55 60

Cys Asn Val Thr Leu Leu Ile Met 65 70

- (2) INFORMATION FOR SEQ ID NO:317:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 576 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..576
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482045
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:317: gtcggactca gtggagaaga aggaagatcc aaatcgatcc gttgaaaagg aatttcgaat 60 120 ttgctgtgcg atgtcgagtg cggtggacgc tacgggaaac ccgatcccta cttcggcggt tttaacggcg tcagcgaagc atataggtat gaggtgtatg ccggagaatg ttgcgttcct 180 caaatgcaag aagaatgatc caaacccaga gaagtgtctc gacaaaggtc gtgacgtcac 240 tcgctgcgtg cttggcttga aaaggagatg ggattatgtt gggtgtatgt attactacac 300 aaacgagttt gatctgtgta ggaaagagca agaagccttc gagaaagtgt gtcccttgaa 360 atgagaatca caagticitg tcatgittig attigtatct cataataaag caaaatgitc 420 attittgaat gagetttact etetecatet ettgtttgtt gteateceat ttattteete 480 tcagatgctt tcgtagtgag ttccaaagac aactaaatga ctcagtttta ttgttcgatg 540 gttcactaat cagcacagaa tggaacaatt gttttt
- (2) INFORMATION FOR SEQ ID NO:318:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 120 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..120
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482046
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:
- Ser Asp Ser Val Glu Lys Lys Glu Asp Pro Asn Arg Ser Val Glu Lys

  1 10 15
- Glu Phe Arg Ile Cys Cys Ala Met Ser Ser Ala Val Asp Ala Thr Gly 20 25 30
- Asn Pro Ile Pro Thr Ser Ala Val Leu Thr Ala Ser Ala Lys His Ile 35 40 45

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Client Docket No. 80142.004 Gly Met Arg Cys Met Pro Glu Asn Val Ala Phe Leu Lys Cys Lys 55 Asn Asp Pro Asn Pro Glu Lys Cys Leu Asp Lys Gly Arg Asp Val Thr 7.0 75 Arg Cys Val Leu Gly Leu Lys Arg Arg Trp Asp Tyr Val Gly Cys Met 85 90 Tyr Tyr Tyr Thr Asn Glu Phe Asp Leu Cys Arg Lys Glu Gln Glu Ala 100 105 Phe Glu Lys Val Cys Pro Leu Lys 115 120 (2) INFORMATION FOR SEQ ID NO:319: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 97 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..97 (D) OTHER INFORMATION: / Ceres Seq. ID 1482047 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:319: Met Ser Ser Ala Val Asp Ala Thr Gly Asn Pro Ile Pro Thr Ser Ala 10 Val Leu Thr Ala Ser Ala Lys His Ile Gly Met Arg Cys Met Pro Glu 25 Asn Val Ala Phe Leu Lys Cys Lys Lys Asn Asp Pro Asn Pro Glu Lys 40 Cys Leu Asp Lys Gly Arg Asp Val Thr Arg Cys Val Leu Gly Leu Lys 55 Arg Arg Trp Asp Tyr Val Gly Cys Met Tyr Tyr Tyr Thr Asn Glu Phe 70 75 Asp Leu Cys Arg Lys Glu Gln Glu Ala Phe Glu Lys Val Cys Pro Leu Lys (2) INFORMATION FOR SEQ ID NO:320: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 71 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..71 (D) OTHER INFORMATION: / Ceres Seq. ID 1482048 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:320: Met Arg Cys Met Pro Glu Asn Val Ala Phe Leu Lys Cys Lys Lys Asn 10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

Met Arg Cys Met Pro Glu Asn Val Ala Phe Leu Lys Cys Lys Lys Asn 1 5 10 15

Asp Pro Asn Pro Glu Lys Cys Leu Asp Lys Gly Arg Asp Val Thr Arg 20 25 30

Cys Val Leu Gly Leu Lys Arg Arg Trp Asp Tyr Val Gly Cys Met Tyr 35 40 45

Tyr Tyr Thr Asn Glu Phe Asp Leu Cys Arg Lys Glu Gln Glu Ala Phe 50 55 60

Glu Lys Val Cys Pro Leu Lys 65 70

(2) INFORMATION FOR SEQ ID NO:321:

#### Attorney Docket No. 2740-1096P Client Docket No. 80142.004

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 645 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..645
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482049
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

aacaaagtct cttcctttat tcatcaatga ctacagcaat atcgatgaat ccatctttgt 60 ttcgagtaat ctgtatactc cattcgataa ttgcgcttac tagtggaacc ttaatgatgt 120 tctacacaga gaaagcttca atctttggac caggaagtga gattgctagc aaactaaaag 180 gatcaacacc acacgatgaa ctactcatac agatttctca gtcattctct ggtttgcttc 240 tgtttgcaat tggtttggta ctgttcatgg tttcgtttgt gaaagacaaa gagtttcata 300 gcttcttcgc tagtgggtcc gtgattctgt atgtgttaat ggctatgtgg agggttttgt 360 tcgagtggaa aattgaagat cttgcttatg aatggcctaa acaagctctt ggagacattg 420 ctttggctat ttcttgggtt ttctttcttg tttattcttg gagagagaag tatgattgat 480 gtttttgatt ttctcttttc tttaaaaaaa aaacttgtgg gctaagcaaa accaqatgat 540 gtattatgat atagtttttg atcttcagat ttgataaaag aggaaatgtg aaaaagcttt 600 agattcagac aagatcagaa caaacaaaat catagtttgg gattc

- (2) INFORMATION FOR SEQ ID NO:322:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 158 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..158
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482050
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

Gln Ser Leu Phe Leu Tyr Ser Ser Met Thr Thr Ala Ile Ser Met Asn
1 10 15

Pro Ser Leu Phe Arg Val Ile Cys Ile Leu His Ser Ile Ile Ala Leu 20 25 30

Thr Ser Gly Thr Leu Met Met Phe Tyr Thr Glu Lys Ala Ser Ile Phe 35 40 45

Gly Pro Gly Ser Glu Ile Ala Ser Lys Leu Lys Gly Ser Thr Pro His

Asp Glu Leu Leu Ile Gln Ile Ser Gln Ser Phe Ser Gly Leu Leu 65 70 75 80

Phe Ala Ile Gly Leu Val Leu Phe Met Val Ser Phe Val Lys Asp Lys 85 90 95

Glu Phe His Ser Phe Phe Ala Ser Gly Ser Val Ile Leu Tyr Val Leu 100 105 110

Met Ala Met Trp Arg Val Leu Phe Glu Trp Lys Ile Glu Asp Leu Ala 115 120 125

Tyr Glu Trp Pro Lys Gln Ala Leu Gly Asp Ile Ala Leu Ala Ile Ser 130 135 140

Trp Val Phe Phe Leu Val Tyr Ser Trp Arg Glu Lys Tyr Asp 145 150 155

- (2) INFORMATION FOR SEQ ID NO:323:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 150 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:

- (D) TOPOLOGY: linear
  (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..150
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482051
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:
- Met Thr Thr Ala Ile Ser Met Asn Pro Ser Leu Phe Arg Val Ile Cys
  1 5 10 15
- Ile Leu His Ser Ile Ile Ala Leu Thr Ser Gly Thr Leu Met Met Phe
  20 25 30
- Tyr Thr Glu Lys Ala Ser Ile Phe Gly Pro Gly Ser Glu Ile Ala Ser 35 40 45
- Lys Leu Lys Gly Ser Thr Pro His Asp Glu Leu Leu Ile Gln Ile Ser
- Gln Ser Phe Ser Gly Leu Leu Phe Ala Ile Gly Leu Val Leu Phe 65 70 75 80
- Met Val Ser Phe Val Lys Asp Lys Glu Phe His Ser Phe Phe Ala Ser 85 90 95
- Gly Ser Val Ile Leu Tyr Val Leu Met Ala Met Trp Arg Val Leu Phe 100 105 110
- Glu Trp Lys Ile Glu Asp Leu Ala Tyr Glu Trp Pro Lys Gln Ala Leu 115 120 125
- Gly Asp Ile Ala Leu Ala Ile Ser Trp Val Phe Phe Leu Val Tyr Ser 130 135 140
- Trp Arg Glu Lys Tyr Asp 145 150
- (2) INFORMATION FOR SEQ ID NO:324:
  - (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 144 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..144
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482052
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:
- Met Asn Pro Ser Leu Phe Arg Val Ile Cys Ile Leu His Ser Ile Ile 1 5 10 15
- Ala Leu Thr Ser Gly Thr Leu Met Met Phe Tyr Thr Glu Lys Ala Ser 20 25 30
- Ile Phe Gly Pro Gly Ser Glu Ile Ala Ser Lys Leu Lys Gly Ser Thr 35 40 45
- Pro His Asp Glu Leu Leu Ile Gln Ile Ser Gln Ser Phe Ser Gly Leu 50 55 60
- Leu Leu Phe Ala Ile Gly Leu Val Leu Phe Met Val Ser Phe Val Lys 70 75 80
- Asp Lys Glu Phe His Ser Phe Phe Ala Ser Gly Ser Val Ile Leu Tyr 85 90 95
- Val Leu Met Ala Met Trp Arg Val Leu Phe Glu Trp Lys Ile Glu Asp  $100 \hspace{1cm} 105 \hspace{1cm} 110$
- Leu Ala Tyr Glu Trp Pro Lys Gln Ala Leu Gly Asp Ile Ala Leu Ala 115 120 125
- Ile Ser Trp Val Phe Phe Leu Val Tyr Ser Trp Arg Glu Lys Tyr Asp 130 135 140

- (2) INFORMATION FOR SEQ ID NO:325:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 623 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..623
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482053
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

aagaagagat gggggaaatg ggaaaggcga taggattgct gataagcggg accttgtgta 60 tcaccattgc gctaatcgca acgcgactct tctctcgctc atctccgacg ttctcatcgt 120 tctcttatct tcactcgcca ttctcggcct tctttttcgt cacctcaatg tctcggtacc 180 tgtggatcca ttagagtggc aaatatcaca agacacagcc tgtaacattg tggcgcgctt 240 agctaatact gttggagcag ctgaatccgt tctgcgggtt gcagcaacag gacatgacaa 300 gaggetettt gttaaggttg tgatetgtet ttaettettg geagetetag gaegaateat 360 atcgggtgac cattgcctat gcaggactat gtttgttctg tctctccatg ctttttcgga 420 gttcaattag aaactccgta ttgaaccgaa gaaacggaga gattttggat tgcgaaacac 480 cttcagagtt gtaatacaca atttgcctaa acgtgttata ttctttgtcc tctttccacc 540 tttacatgtt catagctttg gatagttgta ataatgcttt cagttcctaa atgtagaaat 600 attaatcata gttaatcttt tct

- (2) INFORMATION FOR SEQ ID NO: 326:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 142 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..142
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482054
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:
- Arg Arg Asp Gly Gly Asn Gly Lys Gly Asp Arg Ile Ala Asp Lys Arg  $1 \\ 5 \\ 10 \\ 15$  Asp Leu Val Tyr His His Cys Ala Asn Arg Asn Ala Thr Leu Leu Ser
- 20 25 30 Leu Ile Ser Asp Val Leu Ile Val Leu Leu Ser Ser Leu Ala Ile Leu
- 35 40 45
- Gly Leu Leu Phe Arg His Leu Asn Val Ser Val Pro Val Asp Pro Leu 50 60
- Glu Trp Gln Ile Ser Gln Asp Thr Ala Cys Asn Ile Val Ala Arg Leu
  65 70 75 80
- Ala Asn Thr Val Gly Ala Ala Glu Ser Val Leu Arg Val Ala Ala Thr
  85 90 95
- Gly His Asp Lys Arg Leu Phe Val Lys Val Val Ile Cys Leu Tyr Phe
  100 105 110
- Leu Ala Ala Leu Gly Arg Ile Ile Ser Gly Asp His Cys Leu Cys Arg 115 120 125
- Thr Met Phe Val Leu Ser Leu His Ala Phe Ser Glu Phe Asn 130 135 140
- (2) INFORMATION FOR SEQ ID NO:327:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 505 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..505
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482066
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:327: gttccttagc gcagaagcgt ttcctggcat ctccctatct ccttcacggc atcagaaacc 60 agcacattet teeteeteet etttgattee gegeaggage aagggagete eeatggeeae 120 cttcgtggcg ccctctcgcc cctgctctct cctaggccgt cggctctqcc ttcccaqtqc 180 cctgctcgtg gtctccccaa ccgacgcccg agctccctca actgcccatg gcgccacaaa 240 tetecageeg getteeeetg egtetteete eetgegetee tgeaggeete eetggegeae 300 ctcgccagca gcagggatct ttccctctcc ccatggcgtg caagcmctga gctccccac 360 acgtgttccc ttccccaggc gcgtgastcc ctccggcgtc ggccaatagg caagtttgag 420 caccgagete atccatggmg cmtccmctmc mctcggetec agemeetegg agetecattt ctgcgtmcga gctcgagcag cttgc
- (2) INFORMATION FOR SEQ ID NO:328:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 135 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..135
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482067
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:
- Phe Leu Ser Ala Glu Ala Phe Pro Gly Ile Ser Leu Ser Pro Ser Arg

  1 10 15
- His Gln Lys Pro Ala His Ser Ser Ser Ser Ser Leu Ile Pro Arg Arg 20 25 30
- Ser Lys Gly Ala Pro Met Ala Thr Phe Val Ala Pro Ser Arg Pro Cys 35 40 45
- Ser Leu Leu Gly Arg Arg Leu Cys Leu Pro Ser Ala Leu Leu Val Val
  50 55 60
- Ser Pro Thr Asp Ala Arg Ala Pro Ser Thr Ala His Gly Ala Thr Asn 65 70 75 80
- Leu Gln Pro Ala Ser Pro Ala Ser Ser Ser Leu Arg Ser Cys Arg Pro
  85 90 95
- Pro Trp Arg Thr Ser Pro Ala Ala Gly Ile Phe Pro Ser Pro His Gly 100 105 110
- Val Gln Xaa Leu Ser Ser Pro Thr Arg Val Pro Phe Pro Arg Arg Val 115 120 125
- Xaa Pro Ser Gly Val Gly Gln 130 135
- (2) INFORMATION FOR SEQ ID NO:329:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 98 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..98
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482068
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:
- Met Ala Thr Phe Val Ala Pro Ser Arg Pro Cys Ser Leu Leu Gly Arg

  1 10 15

 Arg
 Leu
 Cys
 Leu
 Pro
 Ser
 Ala
 Leu
 Leu
 Val
 Val
 Ser
 Pro
 Thr
 Asp
 Ala

 Arg
 Ala
 Pro
 Ser
 Thr
 Ala
 His
 Gly
 Ala
 Thr
 Asn
 Leu
 Gln
 Pro
 Ala
 Ser

 Pro
 Ala
 Ser
 Ser
 Leu
 Arg
 Ser
 Cys
 Arg
 Pro
 Pro
 Pro
 Thr
 Arg
 Thr
 Arg
 Pro
 Pro
 His
 Gly
 Val
 Gln
 Xaa
 Leu
 Ser

 Fro
 Ala
 Ala
 Gly
 Ile
 Pro
 Pro
 Ser
 Pro
 P

Gly Gln

- (2) INFORMATION FOR SEQ ID NO:330:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 542 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..542
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482069
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:330: aaaaaagaaa aggtctaatt actcgcctct cttgctcgcc aacgccagtg nccagaggcc 60 agagettegt caaagacaeg eegaaaagag ggggaggega eteggeegag gteeggttee 120 gaactccggt cctccgattt gcgcgtccgg atctaccagc catggcatca tcttcggacc 180 cgtggatgaa ggagtacaat gaagcatcca gacttgctga tgacatcagt tccatgattg 240 ctgatagagg gtcccttcca caatcaggcc cagaaattat gcggcatact tcagccatcc 300 ggagaaaaat aactattett gggactagae tggatagett ggagtegttg ettggeagaa 360 ttcctccaaa gtcaatcact gacaaggaga tgcataagcg ccaagacatg ttttccagtt 420 tgaagtctaa agcaaagcag atggcgacaa gtttcaacat gtcaaacttt gctaacaggg 480 aggatctgct tggtcagagt aaaaaggcag atgacatgag cagagttgct gggttagata 540
- (2) INFORMATION FOR SEQ ID NO:331:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 180 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..180
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482070
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

Lys Arg Lys Gly Leu Ile Thr Arg Leu Ser Cys Ser Pro Thr Pro Val 1 5 10 15

Xaa Arg Gly Gln Ser Phe Val Lys Asp Thr Pro Lys Arg Gly Gly Gly 20 25 30

Asp Ser Ala Glu Val Arg Phe Arg Thr Pro Val Leu Arg Phe Ala Arg
35 40 45

Pro Asp Leu Pro Ala Met Ala Ser Ser Ser Asp Pro Trp Met Lys Glu
50 55 60

Tyr Asn Glu Ala Ser Arg Leu Ala Asp Asp Ile Ser Ser Met Ile Ala 65 70 75 80

Asp Arg Gly Ser Leu Pro Gln Ser Gly Pro Glu Ile Met Arg His Thr 85 90 95

Ser Ala Ile Arg Arg Lys Ile Thr Ile Leu Gly Thr Arg Leu Asp Ser

Leu Glu Ser Leu Leu Gly Arg Ile Pro Pro Lys Ser Ile Thr Asp Lys
115 120 125

Glu Met His Lys Arg Gln Asp Met Phe Ser Ser Leu Lys Ser Lys Ala 130 135 140

Lys Gln Met Ala Thr Ser Phe Asn Met Ser Asn Phe Ala Asn Arg Glu 145 150 155 160

Asp Leu Leu Gly Gln Ser Lys Lys Ala Asp Asp Met Ser Arg Val Ala 165 170 175

Gly Leu Asp Asn 180

- (2) INFORMATION FOR SEQ ID NO:332:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 127 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..127
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482071

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

Met Ala Ser Ser Ser Asp Pro Trp Met Lys Glu Tyr Asn Glu Ala Ser  $1 \hspace{1cm} 15 \hspace{1cm} 1$ 

Arg Leu Ala Asp Asp Ile Ser Ser Met Ile Ala Asp Arg Gly Ser Leu 20 25 30

Pro Gln Ser Gly Pro Glu Ile Met Arg His Thr Ser Ala Ile Arg Arg
35 40 45

Lys Ile Thr Ile Leu Gly Thr Arg Leu Asp Ser Leu Glu Ser Leu Leu 50 60

Gly Arg Ile Pro Pro Lys Ser Ile Thr Asp Lys Glu Met His Lys Arg
65 70 75 80

Gln Asp Met Phe Ser Ser Leu Lys Ser Lys Ala Lys Gln Met Ala Thr 85 90 95

Ser Phe Asn Met Ser Asn Phe Ala Asn Arg Glu Asp Leu Leu Gly Gln 100 105 110

Ser Lys Lys Ala Asp Asp Met Ser Arg Val Ala Gly Leu Asp Asn 115 120 125

- (2) INFORMATION FOR SEQ ID NO:333:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 119 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..119
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482072
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

Met Lys Glu Tyr Asn Glu Ala Ser Arg Leu Ala Asp Asp Ile Ser Ser

Met Ile Ala Asp Arg Gly Ser Leu Pro Gln Ser Gly Pro Glu Ile Met

20 25 30

Arg His Thr Ser Ala Ile Arg Arg Lys Ile Thr Ile Leu Gly Thr Arg
35 40 45

Leu Asp Ser Leu Glu Ser Leu Leu Gly Arg Ile Pro Pro Lys Ser Ile
50 55 60

Thr Asp Lys Glu Met His Lys Arg Gln Asp Met Phe Ser Ser Leu Lys 65 70 75 80

Ser Lys Ala Lys Gln Met Ala Thr Ser Phe Asn Met Ser Asn Phe Ala 85 90 95

Asn Arg Glu Asp Leu Leu Gly Gln Ser Lys Lys Ala Asp Asp Met Ser 100 105 110

Arg Val Ala Gly Leu Asp Asn

- 115
  (2) INFORMATION FOR SEQ ID NO:334:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 652 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..652
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482073
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

gaaaaacgca accaagtcaa ccaacgtcgg cttgaaattc ggccatcacc gttcggatct 60 ttcccccacc cggttgtata aaagcgggcg cctgggattc ccctctcatc cctccttcac 120 catcagcaaa teggtetgee etggttteee eegtegtgaa geagaaacet etetgetgee 180 attaccqtqc tqcqcqccqt cqcqqtqaqq cttqqccaca accqtqqaac ctqtctccat 240 atggcgtagg cggcgtaccg agcttcgcct gatggatttg cagtccagtg ggcccataat 300 ttctcgccgg accgcgagca gcaacaacct ctcctcgccg gccatgacct ctacgcactc 360 caagetetee teegaggace gteatetteg tgeatgtagt egagtaaggt caegaggate 420 tgaagaatca ccctggtatc tggaatctca agtgctagga gaagagcagg tggttcagga 480 ggagccgcct aacactgagg agttcgatct gatctaggtg gcgtttccca gtcgacattg 540 gcgccgacga tccttagttc gttttatgtt tattctttta ttttgtaata agtcttccgc 600 tatgtaataa gtactctgat gttttatgac atttatctct atacactctg tg

- (2) INFORMATION FOR SEQ ID NO:335:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 68 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..68
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482074
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

Lys Asn Ala Thr Lys Ser Thr Asn Val Gly Leu Lys Phe Gly His His  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Arg Ser Asp Leu Ser Pro Thr Arg Leu Tyr Lys Ser Gly Arg Leu Gly
20 25 30

Phe Pro Ser His Pro Ser Phe Thr Ile Ser Lys Ser Val Cys Pro Gly 35 40 45

Phe Pro Arg Arg Glu Ala Glu Thr Ser Leu Leu Pro Leu Pro Cys Cys 50 55 60

- Ala Pro Ser Arg
- 65
- (2) INFORMATION FOR SEQ ID NO:336: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 81 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..81
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482075
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

Met Asp Leu Gln Ser Ser Gly Pro Ile Ile Ser Arg Arg Thr Ala Ser  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$ 

Ser Asn Asn Leu Ser Ser Pro Ala Met Thr Ser Thr His Ser Lys Leu 20 25 30

Ser Ser Glu Asp Arg His Leu Arg Ala Cys Ser Arg Val Arg Ser Arg 35 40 45

Gly Ser Glu Glu Ser Pro Trp Tyr Leu Glu Ser Gln Val Leu Gly Glu 50 55 60

Glu Gln Val Val Gln Glu Glu Pro Pro Asn Thr Glu Glu Phe Asp Leu 65 70 75 80 Ile

- (2) INFORMATION FOR SEQ ID NO:337:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 57 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..57
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482076
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

Met Thr Ser Thr His Ser Lys Leu Ser Ser Glu Asp Arg His Leu Arg

1 10 15

Ala Cys Ser Arg Val Arg Ser Arg Gly Ser Glu Glu Ser Pro Trp Tyr
20 25 30

Leu Glu Ser Gln Val Leu Gly Glu Glu Gln Val Val Gln Glu Glu Pro
35 40 45

Pro Asn Thr Glu Glu Phe Asp Leu Ile

- (2) INFORMATION FOR SEQ ID NO:338:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 814 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..814
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482081
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

attctacatg ccgacacttc gtcgaggaca tgagccagct acttactcgg cttcgcggca 60 gtacagatcc ggccgacact tcatcgtcaa gctctcgcca tttacaactc cttgctccgc 120 cgacctcgac gcaaactgca acttctcgct cgcgcctgtc caggatctgc tctcgccatg 180 qacaqqqaaq ccaaqaaaga agcgttcagg aagtatcttg aatccagtgg cgtgctcgat 240 acceteacga aagetettgt ggegetgtae gaggagaaeg ataageette atetgeagte 300 gaatttgttc agcagaagtt gggtggcccg tcaatctctg actatgaaaa gctcaaggca 360 gagaagctgg acttgcaatt gaagtatgat aagcttttag aaacccacaa ggaaacatgc 420 480 agacagctgg aggaacttaa gaatatgaag tacggtgcac cctggaactg aaataacgtg tgttgacact gtaaatgtat catgaagcat gtacttttta cacctctctg aagcattgct 540 aagctctttg tacaatggaa acatctcatg tatctgattt tagccatctg gatccctttt 600 ggattatgaa gacacccaac tcactgtagg tcccaggtat cagatatcac caatgcagga 660 taaaggatgt gacaactatc atagttgaac catgagcaat tgtttaacca gtaatccagt 720 atcgacaaag agtgtggtct attgacttga gacttctctt ggcatggctt gtaagcagat tttagtagat ttcagtggaa gagatatggc gtgc

- (2) INFORMATION FOR SEQ ID NO:339:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 126 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..126
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482082
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

Phe Tyr Met Pro Thr Leu Arg Gly His Glu Pro Ala Thr Tyr Ser
1 10 15

Ala Ser Arg Gln Tyr Arg Ser Gly Arg His Phe Ile Val Lys Leu Ser 20 25 30

Pro Phe Thr Thr Pro Cys Ser Ala Asp Leu Asp Ala Asn Cys Asn Phe 35 40 45

Ser Leu Ala Pro Val Gln Asp Leu Leu Ser Pro Trp Thr Gly Lys Pro 50 55 60

Arg Lys Lys Arg Ser Gly Ser Ile Leu Asn Pro Val Ala Cys Ser Ile 65 70 75 80

Pro Ser Arg Lys Leu Leu Trp Arg Cys Thr Arg Arg Thr Ile Ser Leu 85 90 95

His Leu Gln Ser Asn Leu Phe Ser Arg Ser Trp Val Ala Arg Gln Ser 100 105 110

Leu Thr Met Lys Ser Ser Arg Gln Arg Ser Trp Thr Cys Asn 115 120 125

- (2) INFORMATION FOR SEQ ID NO:340:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 124 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..124
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482083
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

Met Pro Thr Leu Arg Arg Gly His Glu Pro Ala Thr Tyr Ser Ala Ser 1 5 10 15

Arg Gln Tyr Arg Ser Gly Arg His Phe Ile Val Lys Leu Ser Pro Phe 20 25 30

Thr Thr Pro Cys Ser Ala Asp Leu Asp Ala Asn Cys Asn Phe Ser Leu 35 40 45

Ala Pro Val Gln Asp Leu Leu Ser Pro Trp Thr Gly Lys Pro Arg Lys 50 55 60

Lys Arg Ser Gly Ser Ile Leu Asn Pro Val Ala Cys Ser Ile Pro Ser 65 70 75 80

Arg Lys Leu Leu Trp Arg Cys Thr Arg Arg Thr Ile Ser Leu His Leu 85 90 95

Gln Ser Asn Leu Phe Ser Arg Ser Trp Val Ala Arg Gln Ser Leu Thr 100 105 110

Met Lys Ser Ser Arg Gln Arg Ser Trp Thr Cys Asn

- (2) INFORMATION FOR SEQ ID NO:341:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 97 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..97
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482084
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

Met Asp Arg Glu Ala Lys Lys Glu Ala Phe Arg Lys Tyr Leu Glu Ser

Ser Gly Val Leu Asp Thr Leu Thr Lys Ala Leu Val Ala Leu Tyr Glu 20 25 30

Glu Asn Asp Lys Pro Ser Ser Ala Val Glu Phe Val Gln Gln Lys Leu
35 40 45

Gly Gly Pro Ser Ile Ser Asp Tyr Glu Lys Leu Lys Ala Glu Lys Leu 50 60

Asp Leu Gln Leu Lys Tyr Asp Lys Leu Leu Glu Thr His Lys Glu Thr 65 70 75 80

Cys Arg Gln Leu Glu Glu Leu Lys Asn Met Lys Tyr Gly Ala Pro Trp
85 90 95

Asn

- (2) INFORMATION FOR SEQ ID NO:342:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 592 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..592
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482085
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

60 gaagaatagc cttgtctagc aagaagaaga tagagggatg atgtgattat acgcaaaata ctaaaaccta gggtggtagt acaagcagta gttatgagca ggcctcttct ctttctttcc 120 180 tgttccgttc tttttctttt tccctgcgga attccccttc ttccctagtg cctcgattcg 240 atatttcgat tggattggat taccaaggga cagagggagg gaatcccaca cacacctctg 300 gccctcgcga ggccaaggga agggaagcac tcagcaccca gcagcagaag gaccgccgta aatggcgctg ccggtggcga actggggacc ctggcgctgc ggacgctgtc caagcccatc 360 420 gccagccgcc tcaagagcca ggccgctgtc caccccaagt tccgcaactt catcatcgcc ategeceagg caaaccacca gateaccaca aagatacaga ggegeattta tgageatgee 480 540 acagatgtgg cgatcaggcc tttggatgag cagaaagctg ttcaagctgc tacagatctc atcggggaag cctttatctt ctcggtcgct gtttgctgct ctaatttttg ag

- (2) INFORMATION FOR SEQ ID NO:343:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 97 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..97
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482086
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

Met Ala Leu Pro Val Ala Asn Trp Gly Pro Trp Arg Cys Gly Arg Cys
1 10 15

Pro Ser Pro Ser Pro Ala Ala Ser Arg Ala Arg Pro Leu Ser Thr Pro 20 25 30

Ser Ser Ala Thr Ser Ser Ser Pro Ser Pro Arg Gln Thr Thr Arg Ser 35 40 45

Pro Gln Arg Tyr Arg Gly Ala Phe Met Ser Met Pro Gln Met Trp Arg 50 60

Ser Gly Leu Trp Met Ser Arg Lys Leu Phe Lys Leu Gln Ile Ser
65 70 75 80

Ser Gly Lys Pro Leu Ser Ser Arg Ser Leu Phe Ala Ala Leu Ile Phe 85 90 95

Glu

- (2) INFORMATION FOR SEQ ID NO:344:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 624 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..624
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482091
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:344: 60 gattaaactc acageceaac tectettete geeetegtet gaettegttt eggaeeteee 120 cagtttttcc cctccggccg ccgcacggag aagcagaagc catgcaggcc gccgccgcgc 180 gegeegeeg ecteetegee ttaceggegg ceteggggat ecceggaata eteteeggae cgatcccagg gcgcgcatca tacgccgagg gcgttctcct ttaccgtctc aatggcgctc 240 ccqcttcqcc qtcttctccq cagcatacca ggggcttctc ctcctcctqc ttcqcctccc 300 360 qatcacactq taacctccca tcgcctacca tagcttctca atggttgaat gagaaatcag 420 tacactatca catgacqaca gcacacttct caacggaagc aagtdacatg gaccacccta cagaagctgt agaggagatg taccagaaaa tgttgaaatc tgttgaagct gagaccatgc 480 ctccaaatgc ctggttgtgg tcaatgattg atagctgctc caataaggag gacatcaaac 540 ttctttttca aattttgcag aaactcagag tatttagact atcaaatctt cgcatcagtg 600 caacttcaat gagcatctct gcag
- (2) INFORMATION FOR SEQ ID NO:345:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 103 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..103
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482092
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:
- Ile Lys Leu Thr Ala Gln Leu Leu Phe Ser Pro Ser Ser Asp Phe Val  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Ser Asp Leu Pro Ser Phe Ser Pro Pro Ala Ala Ala Arg Arg Ser Arg 20 25 30
- Ser His Ala Gly Arg Arg Arg Ala Arg Pro Pro Pro Pro Arg Leu Thr 35 40 45
- Gly Gly Leu Gly Asp Pro Arg Asn Thr Leu Arg Thr Asp Pro Arg Ala

- (2) INFORMATION FOR SEQ ID NO:346:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 207 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..207
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482093
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

Leu Asn Ser Gln Pro Asn Ser Ser Ser Arg Pro Arg Leu Thr Ser Phe 1 5 10 15

Arg Thr Ser Pro Val Phe Pro Leu Arg Pro Pro His Gly Glu Ala Glu 20 25 30

Ala Met Gln Ala Ala Ala Ala Arg Ala Arg Arg Leu Leu Ala Leu Pro 35 40 45

Ala Ala Ser Gly Ile Pro Gly Ile Leu Ser Gly Pro Ile Pro Gly Arg
50 60

Ala Ser Tyr Ala Glu Gly Val Leu Leu Tyr Arg Leu Asn Gly Ala Pro 65 70 75 80

Ala Ser Pro Ser Ser Pro Gln His Thr Arg Gly Phe Ser Ser Cys 85 90 95

Phe Ala Ser Arg Ser His Cys Asn Leu Pro Ser Pro Thr Ile Ala Ser

Gln Trp Leu Asn Glu Lys Ser Val His Tyr His Met Thr Thr Ala His 115 120 125

Phe Ser Thr Glu Ala Ser Xaa Met Asp His Pro Thr Glu Ala Val Glu 130 135 140

Glu Met Tyr Gln Lys Met Leu Lys Ser Val Glu Ala Glu Thr Met Pro 145 150 155 160

Pro Asn Ala Trp Leu Trp Ser Met Ile Asp Ser Cys Ser Asn Lys Glu 165 170 175

Asp Ile Lys Leu Leu Phe Gln Ile Leu Gln Lys Leu Arg Val Phe Arg 180 185 190

Leu Ser Asn Leu Arg Ile Ser Ala Thr Ser Met Ser Ile Ser Ala 195 200 205

- (2) INFORMATION FOR SEQ ID NO:347:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 174 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..174
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482094

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

Met Gln Ala Ala Ala Ala Arg Ala Arg Leu Leu Ala Leu Pro Ala 1 5 10 15

Ala Ser Gly Ile Pro Gly Ile Leu Ser Gly Pro Ile Pro Gly Arg Ala 25 Ser Tyr Ala Glu Gly Val Leu Leu Tyr Arg Leu Asn Gly Ala Pro Ala 40 45 Ser Pro Ser Ser Pro Gln His Thr Arg Gly Phe Ser Ser Ser Cys Phe 55 60 Ala Ser Arg Ser His Cys Asn Leu Pro Ser Pro Thr Ile Ala Ser Gln 70 75 Trp Leu Asn Glu Lys Ser Val His Tyr His Met Thr Thr Ala His Phe 85 90 Ser Thr Glu Ala Ser Xaa Met Asp His Pro Thr Glu Ala Val Glu Glu 100 105 110 Met Tyr Gln Lys Met Leu Lys Ser Val Glu Ala Glu Thr Met Pro Pro 120 125 Asn Ala Trp Leu Trp Ser Met Ile Asp Ser Cys Ser Asn Lys Glu Asp 135 140 Ile Lys Leu Leu Phe Gln Ile Leu Gln Lys Leu Arg Val Phe Arg Leu 150 155 Ser Asn Leu Arg Ile Ser Ala Thr Ser Met Ser Ile Ser Ala 165

- (2) INFORMATION FOR SEQ ID NO:348:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 558 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..558
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482095
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

atgtataacg cgaccccct ccccagtccc cccagcggca aggcggcaac cgttctcccg 60 cgtcccgcac tcccgcccct tttccttttg ctccttcctt cctcgggaag cctagggctt 120 aggetttaag egeegegant gtaeggegge ggeggeggeg gegggeacta egaeggagge 180 ageggtggeg cegggaacge taacgegete tteggeggeg ggggetteat geeeteacag 240 tccacggtgg tcccggagaa cagcggcctc tctaagggtc ggagcgcgca gacgctgctc 300 ccgctcaccg tgaaacagac catggacgcg gcgcaaacca gcggtgacag gtctaatttc 360 gccatcaacg gcgttgaggt gtctacgatt aggcttgttg gacgcatgct aggtaaggtt 420 gagcgtgtca cagatgttgt attcactctt gatgatggta ctggcaagat agatgtgaat 480 cgctgggaaa atgaggcttc cgatgctaag gagatggctg atgctaataa cgagaactat 540 gtcatagtca ttggcggt

- (2) INFORMATION FOR SEQ ID NO:349:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 110 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..110
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482096
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

Met Pro Ser Gln Ser Thr Val Val Pro Glu Asn Ser Gly Leu Ser Lys 1 5 10 15 Gly Arg Ser Ala Gln Thr Leu Leu Pro Leu Thr Val Lys Gln Thr Met 20 25 30

Asp Ala Ala Gln Thr Ser Gly Asp Arg Ser Asn Phe Ala Ile Asn Gly

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        35
                            40
Val Glu Val Ser Thr Ile Arg Leu Val Gly Arg Met Leu Gly Lys Val
Glu Arg Val Thr Asp Val Val Phe Thr Leu Asp Asp Gly Thr Gly Lys
                    70
Ile Asp Val Asn Arg Trp Glu Asn Glu Ala Ser Asp Ala Lys Glu Met
                                    90
Ala Asp Ala Asn Asn Glu Asn Tyr Val Ile Val Ile Gly Gly
            100
                                105
(2) INFORMATION FOR SEQ ID NO:350:
     (i) SEQUENCE CHARACTERISTICS:
          (A) LENGTH: 79 amino acids
          (B) TYPE: amino acid
          (C) STRANDEDNESS:
          (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: peptide
    (ix) FEATURE:
          (A) NAME/KEY: peptide
          (B) LOCATION: 1..79
```

- (D) OTHER INFORMATION: / Ceres Seq. ID 1482097
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

Met Asp Ala Ala Gln Thr Ser Gly Asp Arg Ser Asn Phe Ala Ile Asn 10

Gly Val Glu Val Ser Thr Ile Arg Leu Val Gly Arg Met Leu Gly Lys 25

Val Glu Arg Val Thr Asp Val Val Phe Thr Leu Asp Asp Gly Thr Gly 40

Lys Ile Asp Val Asn Arg Trp Glu Asn Glu Ala Ser Asp Ala Lys Glu 55

Met Ala Asp Ala Asn Asn Glu Asn Tyr Val Ile Val Ile Gly Gly 70

- (2) INFORMATION FOR SEQ ID NO:351:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 581 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..581
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482102
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

aaagatattt gtgtagataa cagtagatta aagtctaaaa taagagagga gatggtggat 60 gaaatagggg agttttgaca gcctaattgt aattggaagc ctttcttggc ctgccctcgg 120 cgcggaaccg tcccgcactc acgcatcagc gtcgcacact cgcacgtgcc tccgtcttcg 180 ctccctcggt ccctccgcag cgtcagatcg accgtcgctc gcggasccta gcgacgccgt 240 tetcaagtee gageeggagt ageaegagag cettgeggna tatgagtege geegeggeag 300 caagaacgat ggatgaggaa gccgagtacc tggagacggc tcgggccgac cgctccgtgt 360 ggctcatgaa gtgccccccg gtcgtttccc gcgcctggca ggccgcctcc gcctcttcct 420 ccgatgctgc caacgccaac cccgtcgttg ccaaggtcgt cctttccctt gacctgttgc 480 gccaagaaga acgcccggaa gagcctacgc tccagttcaa gatggaattg gctcaaacta 540 acaccgggaa tacacctaag agctactctt tgaatatgtt c

- (2) INFORMATION FOR SEQ ID NO:352:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 100 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..100 (D) OTHER INFORMATION: / Ceres Seq. ID 1482103 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:352: Met Ser Arg Ala Ala Ala Arg Thr Met Asp Glu Glu Ala Glu Tyr 10 Leu Glu Thr Ala Arg Ala Asp Arg Ser Val Trp Leu Met Lys Cys Pro 25 Pro Val Val Ser Arg Ala Trp Gln Ala Ala Ser Ala Ser Ser Ser Asp 40 Ala Ala Asn Ala Asn Pro Val Val Ala Lys Val Val Leu Ser Leu Asp Leu Leu Arg Gln Glu Glu Arg Pro Glu Glu Pro Thr Leu Gln Phe Lys 75 Met Glu Leu Ala Gln Thr Asn Thr Gly Asn Thr Pro Lys Ser Tyr Ser 90 Leu Asn Met Phe 100 (2) INFORMATION FOR SEQ ID NO:353: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 91 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..91 (D) OTHER INFORMATION: / Ceres Seq. ID 1482104 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:353: Met Asp Glu Glu Ala Glu Tyr Leu Glu Thr Ala Arg Ala Asp Arg Ser 10 Val Trp Leu Met Lys Cys Pro Pro Val Val Ser Arg Ala Trp Gln Ala 25 Ala Ser Ala Ser Ser Ser Asp Ala Ala Asn Ala Asn Pro Val Val Ala 40 Lys Val Val Leu Ser Leu Asp Leu Leu Arg Gln Glu Glu Arg Pro Glu 55 60 Glu Pro Thr Leu Gln Phe Lys Met Glu Leu Ala Gln Thr Asn Thr Gly 70 Asn Thr Pro Lys Ser Tyr Ser Leu Asn Met Phe 85 (2) INFORMATION FOR SEQ ID NO:354: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 72 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..72 (D) OTHER INFORMATION: / Ceres Seq. ID 1482105 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

Met Lys Cys Pro Pro Val Val Ser Arg Ala Trp Gln Ala Ala Ser Ala

Ser Ser Ser Asp Ala Ala Asn Ala Asn Pro Val Val Ala Lys Val Val

20 25 Leu Ser Leu Asp Leu Leu Arg Gln Glu Glu Arg Pro Glu Glu Pro Thr 40 45 Leu Gln Phe Lys Met Glu Leu Ala Gln Thr Asn Thr Gly Asn Thr Pro 55 Lys Ser Tyr Ser Leu Asn Met Phe 65 70 (2) INFORMATION FOR SEQ ID NO:355: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 812 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..812 (D) OTHER INFORMATION: / Ceres Seq. ID 1482106 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:355: gatcgagttg gctcattaac aattcagttt cgttaacaag cctggaggga aaaaggacac 60 atcacccaaa ggcacaggga atcgcaccat cgtgggaccc gtacagcgca ccgcccagcc 120 gccggatctg cgccggcgac gcgcccggac gtcggatcta cgccgccgca ggargggga 180 ggcggcgctg tggccgttct ctgcccgtga gcgcccggat ccgtcccgcc gcaaqqatta 240 tggatccgaa agagaagcca aatgtatcga gcagtccacc aacaccacgg ctggactqca 300 taaaatgctt tgatatgctc tggttctgtt actcaccatt ccaccagatg cagaattatt 360 accggtatgg ggagttcgac acctgcttcg gcaagtgggg cgatcttatg ggctgcctcg 420 ctctcaagac aaagcggaag gcagaggtgg aggagateet categegegg gagaaggeea 480 aaccacatat ctggacctac cggacggtcg atgaggcatc ggagaattgg tggcggatgt 540 acaagcatgc tgtgatgatg tcaccactgc caggttctgc tcagcttcct cccaggtccg 600 atgaatcttg atagtcgagg ggatttgtgc aagtgttttg tttgcgctta tgtcacatta 660 tggcattagc gatcatttct gttcaaaatc ttactgtaaa ctacaatacc aagagatgga 720 accattgagg taggcagaac atgtactgct gaagattgag aatttgaaat cgccttggat 780 tcagaagcaa ataaatgaac gaggtttcct tt (2) INFORMATION FOR SEQ ID NO:356: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 202 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..202 (D) OTHER INFORMATION: / Ceres Seq. ID 1482107 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:356: Ser Ser Trp Leu Ile Asn Asn Ser Val Ser Leu Thr Ser Leu Glu Gly 10 Lys Arg Thr His His Pro Lys Ala Gln Gly Ile Ala Pro Ser Trp Asp Pro Tyr Ser Ala Pro Pro Ser Arg Arg Ile Cys Ala Gly Asp Ala Pro Gly Arg Arg Ile Tyr Ala Ala Ala Gly Kaa Gly Arg Arg Arg Cys Gly

Arg Ser Leu Pro Val Ser Ala Arg Ile Arg Pro Ala Ala Arg Ile Met

Asp Pro Lys Glu Lys Pro Asn Val Ser Ser Pro Pro Thr Pro Arg

Leu Asp Cys Ile Lys Cys Phe Asp Met Leu Trp Phe Cys Tyr Ser Pro 100 105 110

75

Phe His Gln Met Gln Asn Tyr Tyr Arg Tyr Gly Glu Phe Asp Thr Cys 120 Phe Gly Lys Trp Gly Asp Leu Met Gly Cys Leu Ala Leu Lys Thr Lys 135 140 Arg Lys Ala Glu Val Glu Ile Leu Ile Ala Arg Glu Lys Ala Lys 155 150 Pro His Ile Trp Thr Tyr Arg Thr Val Asp Glu Ala Ser Glu Asn Trp 170 165 Trp Arg Met Tyr Lys His Ala Val Met Met Ser Pro Leu Pro Gly Ser 180 185 Ala Gln Leu Pro Pro Arg Ser Asp Glu Ser 195 200 (2) INFORMATION FOR SEQ ID NO:357: (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..123
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482108

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

Met Asp Pro Lys Glu Lys Pro Asn Val Ser Ser Pro Pro Thr Pro 10 Arg Leu Asp Cys Ile Lys Cys Phe Asp Met Leu Trp Phe Cys Tyr Ser 20 25 Pro Phe His Gln Met Gln Asn Tyr Tyr Arg Tyr Gly Glu Phe Asp Thr 40 Cys Phe Gly Lys Trp Gly Asp Leu Met Gly Cys Leu Ala Leu Lys Thr 55 Lys Arg Lys Ala Glu Val Glu Glu Ile Leu Ile Ala Arg Glu Lys Ala 75 70 Lys Pro His Ile Trp Thr Tyr Arg Thr Val Asp Glu Ala Ser Glu Asn 85 90 Trp Trp Arg Met Tyr Lys His Ala Val Met Met Ser Pro Leu Pro Gly 110

105

Ser Ala Gln Leu Pro Pro Arg Ser Asp Glu Ser 115 120

(2) INFORMATION FOR SEQ ID NO:358:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 675 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..675
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482113
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

| ataaatcccg | agaccaaacc | ctcgcctcca | ttcgtccccc | gccgccgccg | ctcccagtct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ctacgcggaa | gcagcgcctc | gcaccgctcc | tacccaatgg | cgccgacgtc | gaagctgtcg | 120 |
| atgagcatca | agcgtgcgtc | gcgctcgcac | gcgtaccacc | gccgtgggct | ctgggccatc | 180 |
| aaggccaaga | acggcggcgt | cttccccaag | gccgagaaac | mngcmgccgc | cgcggaaccc | 240 |
| aagttctacc | ccgccgacga | cgtcaagcct | cgcgttccca | gcacccgcaa | gcctaatccc | 300 |
| accaagctca | ggtcgagcat | cacgcctggg | acggtgctga | tcctcctcgc | ggggcagaac | 360 |
| ttgggttccg | cggcggcggc | kgcggccggg | tccgacggcg | cggccgcggc | gcaggcggcg | 420 |
|            |            |            |            |            |            |     |

gccttccgga aggccaacga gggcaaggcg tagctgcctg tgctgtgcat atgcatgtt 480 ggttaattag ctggagtgct ccggtcgctt aatctgttgg atttgatggt ttgttggttg 540 tgtgcgcgtg tgtttcagtg atttgctcct tttttttct ttctcgtgga tctatcgatg 600 gatgaacatg aatgaatgaa ccgaactgca cagctccgtt gtgagctgat gcatgcatgc 660 actagctagt agctg

- (2) INFORMATION FOR SEQ ID NO:359:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 150 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..150
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482114
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:
- Ile Asn Pro Glu Thr Lys Pro Ser Pro Pro Phe Val Pro Arg Arg 1 5 10 15
- Met Ala Pro Thr Ser Lys Leu Ser Met Ser Ile Lys Arg Ala Ser Arg
- Ser His Ala Tyr His Arg Arg Gly Leu Trp Ala Ile Lys Ala Lys Asn 50 60
- Gly Gly Val Phe Pro Lys Ala Glu Lys Xaa Xaa Ala Ala Ala Glu Pro 65 70 75 80
- Lys Phe Tyr Pro Ala Asp Asp Val Lys Pro Arg Val Pro Ser Thr Arg 85 90 95
- Lys Pro Asn Pro Thr Lys Leu Arg Ser Ser Ile Thr Pro Gly Thr Val
- Leu Ile Leu Leu Ala Gly Gln Asn Leu Gly Ser Ala Ala Ala Xaa Ala 115 120 125
- Ala Gly Ser Asp Gly Ala Ala Ala Ala Gln Ala Ala Ala Phe Arg Lys 130 135 140
- Ala Asn Glu Gly Lys Ala
- 145 150
- (2) INFORMATION FOR SEQ ID NO:360:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 118 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
    - (ii) MOLECULE TYPE: peptide
    - (ix) FEATURE:
      - (A) NAME/KEY: peptide
      - (B) LOCATION: 1..118
      - (D) OTHER INFORMATION: / Ceres Seq. ID 1482115
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:
- Ser His Ala Tyr His Arg Arg Gly Leu Trp Ala Ile Lys Ala Lys Asn 20 25 30
- Gly Gly Val Phe Pro Lys Ala Glu Lys Xaa Xaa Ala Ala Ala Glu Pro 35 40 45
- Lys Phe Tyr Pro Ala Asp Asp Val Lys Pro Arg Val Pro Ser Thr Arg 50 55 60
- Lys Pro Asn Pro Thr Lys Leu Arg Ser Ser Ile Thr Pro Gly Thr Val 65 70 75 80

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Leu Ile Leu Leu Ala Gly Gln Asn Leu Gly Ser Ala Ala Ala Xaa Ala 85 90 95

Ala Gly Ser Asp Gly Ala Ala Ala Ala Gln Ala Ala Ala Phe Arg Lys 100 105 110

Ala Asn Glu Gly Lys Ala 115

- (2) INFORMATION FOR SEQ ID NO:361:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 110 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..110
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482116
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

Met Ser Ile Lys Arg Ala Ser Arg Ser His Ala Tyr His Arg Arg Gly

Leu Trp Ala Ile Lys Ala Lys Asn Gly Gly Val Phe Pro Lys Ala Glu 20 25 30

Lys Xaa Xaa Ala Ala Ala Glu Pro Lys Phe Tyr Pro Ala Asp Asp Val

Lys Pro Arg Val Pro Ser Thr Arg Lys Pro Asn Pro Thr Lys Leu Arg 50 55 60

Ser Ser Ile Thr Pro Gly Thr Val Leu Ile Leu Leu Ala Gly Gln Asn 65 70 75 80

Leu Gly Ser Ala Ala Ala Ala Ala Gly Ser Asp Gly Ala Ala Ala 85 90 95

Ala Gln Ala Ala Ala Phe Arg Lys Ala Asn Glu Gly Lys Ala 100 105 110

- (2) INFORMATION FOR SEQ ID NO:362:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 871 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -

actgcatgtt attaataaaa gaaagttatt t

- (B) LOCATION: 1..871
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482117
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

| (22-2) ~~  | - g        |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| gagccaaaca | tgcccgtccg | cccagtctcg | ctccaaacca | aagccatcgg | aggagcaact | 60  |
| ggacgaccat | ggcctcgccg | ctgctcaagt | cacactctca | gctcgccgcc | gccgccgccc | 120 |
| tgcactccgt | gaggagagcc | gaccgctgcc | ctgcgacact | acacctgggc | aagttccatg | 180 |
| accacagact | caggtccggc | cgttctaaga | gatccggttc | agcgagggtg | ggcgccttcc | 240 |
| catcactaga | cataatacca | ctgatggtga | cgatggtgga | gcacgtggac | atgtcgcggg | 300 |
| actacatcat | gaccaagtcc | atctggcatc | tcagcgacgt | agccctcaag | agcgtctata | 360 |
| ccttctacgc | catgttcacc | gtctggggag | tctgcttctt | cgcgtccatg | aaggatccct | 420 |
| tctacgacag | cgagacgtac | aggagccagg | gtggcgacgg | gaccgtgcac | tggtactacg | 480 |
| acaggcaaga | ggacctggag | gcgtctgcga | qqqaqqaqct | gctgcgggag | gagctgctcg | 540 |
| aggagattga | gcagagggtt | gggggcctca | gggagctgga | ggaagcgagc | aaggaggagc | 600 |
| ageteacaaa | gtgatcacgc | gcgggcgaat | accgaatggg | atggatacgg | gctactcatc | 660 |
| agetetetat | ctgagetteg | ttagcaaata | agttcagact | tctttactgc | cctgctcaag | 720 |
| tctgtatata | gccaaaaccc | aaaacgattg | atcaactgcg | ctactgcagt | gcaatagcag | 780 |
| gatacgtata | atttttt    | caagggaaac | aggagggag  | tgcagtgcac | ccctqcccat | 840 |
| gucucgeueu | 90000000   |            |            | , , ,      | -          |     |

Client Docket No. 80142.004

Attorney Docket No. 2740-1096P

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 203 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..203
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482118
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

Ala Lys His Ala Arg Pro Pro Ser Leu Ala Pro Asn Gln Ser His Arg 10

Arg Ser Asn Trp Thr Thr Met Ala Ser Pro Leu Leu Lys Ser His Ser 25

Gln Leu Ala Ala Ala Ala Leu His Ser Val Arg Arg Ala Asp Arg 40

Cys Pro Ala Thr Leu His Leu Gly Lys Phe His Asp His Gly Leu Arg 55

Ser Gly Arg Ser Lys Arg Ser Gly Ser Ala Arg Val Gly Ala Phe Pro 75 70

Ser Leu Asp Val Val Pro Leu Met Val Thr Met Val Glu His Val Asp 90 85

Met Ser Arg Asp Tyr Val Val Thr Lys Ser Ile Trp His Leu Ser Asp 105 100

Val Ala Leu Lys Ser Val Tyr Thr Phe Tyr Ala Met Phe Thr Val Trp 125 120

Gly Val Cys Phe Phe Ala Ser Met Lys Asp Pro Phe Tyr Asp Ser Glu 140 135

Thr Tyr Arg Ser Gln Gly Gly Asp Gly Thr Val His Trp Tyr Tyr Asp 155 150

Arg Gln Glu Asp Leu Glu Ala Ser Ala Arg Glu Glu Leu Leu Arg Glu 170 165 Glu Leu Leu Glu Glu Ile Glu Gln Arg Val Gly Gly Leu Arg Glu Leu

185

Glu Glu Ala Ser Lys Glu Glu Gln Leu Thr Lys 200 195

- (2) INFORMATION FOR SEQ ID NO:364:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 181 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..181
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482119
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

Met Ala Ser Pro Leu Leu Lys Ser His Ser Gln Leu Ala Ala Ala Ala 10

Ala Leu His Ser Val Arg Arg Ala Asp Arg Cys Pro Ala Thr Leu His 25

Leu Gly Lys Phe His Asp His Gly Leu Arg Ser Gly Arg Ser Lys Arg 40

Ser Gly Ser Ala Arg Val Gly Ala Phe Pro Ser Leu Asp Val Val Pro 55

Leu Met Val Thr Met Val Glu His Val Asp Met Ser Arg Asp Tyr Val

80 70 75 65 Val Thr Lys Ser Ile Trp His Leu Ser Asp Val Ala Leu Lys Ser Val 90 85 Tyr Thr Phe Tyr Ala Met Phe Thr Val Trp Gly Val Cys Phe Phe Ala 105 100 Ser Met Lys Asp Pro Phe Tyr Asp Ser Glu Thr Tyr Arg Ser Gln Gly 120 Gly Asp Gly Thr Val His Trp Tyr Tyr Asp Arg Gln Glu Asp Leu Glu 140 135 Ala Ser Ala Arg Glu Glu Leu Leu Arg Glu Glu Leu Leu Glu Glu Ile 155 150 Glu Gln Arg Val Gly Gly Leu Arg Glu Leu Glu Glu Ala Ser Lys Glu 170 165 Glu Gln Leu Thr Lys 180 (2) INFORMATION FOR SEQ ID NO:365:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 116 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..116
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482120
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

Met Val Thr Met Val Glu His Val Asp Met Ser Arg Asp Tyr Val Val 10

Thr Lys Ser Ile Trp His Leu Ser Asp Val Ala Leu Lys Ser Val Tyr 25

Thr Phe Tyr Ala Met Phe Thr Val Trp Gly Val Cys Phe Phe Ala Ser 40

Met Lys Asp Pro Phe Tyr Asp Ser Glu Thr Tyr Arg Ser Gln Gly Gly

Asp Gly Thr Val His Trp Tyr Tyr Asp Arg Gln Glu Asp Leu Glu Ala 75

Ser Ala Arg Glu Glu Leu Leu Arg Glu Glu Leu Leu Glu Glu Ile Glu 90

Gln Arg Val Gly Gly Leu Arg Glu Leu Glu Glu Ala Ser Lys Glu Glu 105 110 100

Gln Leu Thr Lys

115

- (2) INFORMATION FOR SEQ ID NO:366:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 531 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..531
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482121
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:366: tatggacttc attaccgcca cttaataacg gatctacaga gcatccgaaa cctttaatat

tggctattgc gtctcaagac tctgcatcgt tttttcggga ccgtagtctt ggttcagatt ctcccatatc tggattgatt gctttgctca ctgctgttga tgctctttct cacattcatg

gtctaagcaa gcttaagaaa cagcttgtgt tcgctgtttt taatggtgag gcctggggtt

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#### Attorney Docket No. 2740-10969 Client Docket No. 80142.004

atcttggtag tcggaaattc ttacaggaat tagatgaagg cgctgcttct gtgaatggaa 300 ttagtagctt aaagattgac caggtactgg agattggttc tgttggcaag gctatacttg 360 aggaatatcc atcattttat gtgcatgctg aagggaatcc atcagcttca aaggaaatat 420 tagatgcact gcaaagtsca gcaagtctct tggttctgat aatgttaaag taaaacaagc 480 agcttcatca aatcctggtg ttccaccatc ttcattaatg tcattcataa g

- (2) INFORMATION FOR SEQ ID NO:367:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 156 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..156
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482122
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

Trp Thr Ser Leu Pro Pro Leu Asn Asn Gly Ser Thr Glu His Pro Lys
1 5 10 15

Pro Leu Ile Leu Ala Ile Ala Ser Gln Asp Ser Ala Ser Phe Phe Arg
20 25 30

Asp Arg Ser Leu Gly Ser Asp Ser Pro Ile Ser Gly Leu Ile Ala Leu 35 40 45

Leu Thr Ala Val Asp Ala Leu Ser His Ile His Gly Leu Ser Lys Leu 50 55 60

Lys Lys Gln Leu Val Phe Ala Val Phe Asn Gly Glu Ala Trp Gly Tyr 65 70 75 80

Leu Gly Ser Arg Lys Phe Leu Gln Glu Leu Asp Glu Gly Ala Ala Ser 85 90 95

Val Asn Gly Ile Ser Ser Leu Lys Ile Asp Gln Val Leu Glu Ile Gly
100 105 110

Ser Val Gly Lys Ala Ile Leu Glu Glu Tyr Pro Ser Phe Tyr Val His 115 120 125

Ala Glu Gly Asn Pro Ser Ala Ser Lys Glu Ile Leu Asp Ala Leu Gln 130 135 140

Ser Xaa Ala Ser Leu Leu Val Leu Ile Met Leu Lys 145 150 155

- (2) INFORMATION FOR SEQ ID NO:368:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 985 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..985
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482127
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

| aaatttctcg | atcaaacatg | ctctattgcc | ctgtatctat | cctctatcga | agccggagac | 60    |
|------------|------------|------------|------------|------------|------------|-------|
| cccagaaaga | gtccgtaaac | aactcccggc | catggcgacc | gcagaccggg | tcgccgccac | 120   |
| cttcctctcc | tctttcccca | ctcaccatcc | ccgccccttt | tcctccgttt | ccctcgtgac | 180   |
| aaaccctgtc | ctacccgtct | cccttcgggc | cgctgtcaca | ggtggcccac | ggctcgcctc | 240   |
| ccgtctccgg | gtccaccgcg | tcggcgccgc | cgtcgcccag | cttcccacca | cgaatccgga | . 300 |
| ggtagcttct | ggggagaaga | agatcagatg | gtcatcaagg | gctgtgcggt | cttttgcgat | 360   |
| ggcagagctg | gaggcccgga | agatgaggta | ccctaccaca | ggcaccgagg | ggctcctcat | 420   |
| gggcattctt | gttgaaggaa | ctagtggcgc | asaaaacttt | tgcgtgctaa | tggaaccaca | 480   |
| cttctcaaag | tgcgtgagga | ggcagcgaat | gttcttggga | aatcagaaat | gttttacttt | 540   |
| agtcccatgc | atccaccatt | gacagaagct | gcacaacgag | cccttgattg | ggctgtcaat | 600   |
|            |            |            |            |            |            |       |

gaaaaattga aatcaggtga ggatggagaa gtaaccgcca atcatttgct actggggata 660 tggtcagata aagagtcggc tggtcataaa atcctgtatt cgcwtggatt tgacgatgag 720 aaagccagtt tactggccaa aacggctggt gaagaggctg caatgagtct tagagagcaa 780 ggagagcacc taatttattc gtcaacttaa gttggtattg tgcactagct tttatgcact 840 tcttggtgcc tcgagacgtt gacctggaga ggctgcctct acaaacttta gaacttatta 900 tggagatatg ttaggtcaga tacgatattt gtactctcac gattgccgat gcctgtgaaa 960

(2) INFORMATION FOR SEQ ID NO:369:

acqttqcqct ttqtttqtca cqqqq

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 186 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..186
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482128
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

Asn Phe Ser Ile Lys His Ala Leu Leu Pro Cys Ile Tyr Pro Leu Ser
1 10 15

Lys Pro Glu Thr Pro Glu Arg Val Arg Lys Gln Leu Pro Ala Met Ala 20 25 30

Thr Ala Asp Arg Val Ala Ala Thr Phe Leu Ser Ser Phe Pro Thr His 35 40 45

His Pro Arg Pro Phe Ser Ser Val Ser Leu Val Thr Asn Pro Val Leu 50 55 60

Pro Val Ser Leu Arg Ala Ala Val Thr Gly Gly Pro Arg Leu Ala Ser 65 70 75 80

Arg Leu Arg Val His Arg Val Gly Ala Ala Val Ala Gln Leu Pro Thr 85 90 95

Thr Asn Pro Glu Val Ala Ser Gly Glu Lys Lys Ile Arg Trp Ser Ser 100 105 110

Arg Ala Val Arg Ser Phe Ala Met Ala Glu Leu Glu Ala Arg Lys Met 115 120 125

Arg Tyr Pro Thr Thr Gly Thr Glu Gly Leu Leu Met Gly Ile Leu Val 130 135 140

Glu Gly Thr Ser Gly Ala Xaa Asn Phe Cys Val Leu Met Glu Pro His 145 150 155 160

Phe Ser Lys Cys Val Arg Arg Gln Arg Met Phe Leu Gly Asn Gln Lys 165 170 175

Cys Phe Thr Leu Val Pro Cys Ile His His 180 185

- (2) INFORMATION FOR SEQ ID NO:370:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 156 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..156
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482129
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

Met Ala Thr Ala Asp Arg Val Ala Ala Thr Phe Leu Ser Ser Phe Pro 1 10 15

Thr His His Pro Arg Pro Phe Ser Ser Val Ser Leu Val Thr Asn Pro 20 25 30 Ser Ser Arg Ala Val Arg Ser Phe Ala Met Ala Glu Leu Glu Ala Arg 85 90 95

Lys Met Arg Tyr Pro Thr Thr Gly Thr Glu Gly Leu Leu Met Gly Ile 100 105 110

Leu Val Glu Gly Thr Ser Gly Ala Xaa Asn Phe Cys Val Leu Met Glu
115 120 125

Pro His Phe Ser Lys Cys Val Arg Arg Gln Arg Met Phe Leu Gly Asn 130 135 140

Gln Lys Cys Phe Thr Leu Val Pro Cys Ile His His 145 150 155

- (2) INFORMATION FOR SEQ ID NO:371:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 93 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..93
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482130
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

Met Phe Tyr Phe Ser Pro Met His Pro Pro Leu Thr Glu Ala Ala Gln

1 10 15

Arg Ala Leu Asp Trp Ala Val Asn Glu Lys Leu Lys Ser Gly Glu Asp 20 25 30

Gly Glu Val Thr Ala Asn His Leu Leu Leu Gly Ile Trp Ser Asp Lys 35 40 45

Glu Ser Ala Gly His Lys Ile Leu Tyr Ser Leu Gly Phe Asp Asp Glu
50 55 60

Lys Ala Ser Leu Leu Ala Lys Thr Ala Gly Glu Glu Ala Ala Met Ser 65 70 75 80

Leu Arg Glu Gln Gly Glu His Leu Ile Tyr Ser Ser Thr 85 90

- (2) INFORMATION FOR SEQ ID NO:372:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 852 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..852
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482131
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

ataggtgggt cgaacttcga aggggttcga ggacttcagc tatggcatct gtgggacgtg 60 caggacgagg agggaaagga gatggagga agggagaagg gtcgctggct cgcagggcgt 120 ggaggcagta cctgctccag ctccagcaac atcctctccg cacaaagatg atcacggcgg 180 ggtgcctcgc cggcgtcagt gactccgtgg cgcagaagct ctctgggttc cagaagattg 240 agaaacgcag actcctgctc aagatgctct ttggttttgc atatggtggc ccatttggac atttcttgca caaaattttg gattacatct tccaaagggaa gaaggatacc aaaaccatag caaagaaggt gttattggag caagtgacat cttctccctg gaataacata ttgttcttgt 420

tctattatgg atatgttgtt gagaggaggc ctttgaagga ggtgacgacc agggtgaaga 480
aacaataccc ttctgtgcaa ctcagcgctt ggatgttttg gccgatagtt ggttggataa 540
accaccagta catgccttta caattccgag tgatcttcca cagctttgtc gcatgttgtt 600
gggggatttt cctgaacctt cgtgcaaggg ctatgtctct gaagcaggcc tagatggttt agaaggaacg tatagcagca aagctcctgc ccggtgctaa ctaaagcagc cgaagaagga 720
ggatgctgga agctgtatcc tgcacggtta caaaaaccgt tgtttatttc ctggtagtag 780
tcggtttatt tgaatgtcaa cgcatgcgaa gacagattat gcttttgta aaaaaaaatt 840

- (2) INFORMATION FOR SEQ ID NO:373:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 216 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

qtqatqqqaq cg

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..216
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482132
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

Arg Trp Val Glu Leu Arg Arg Gly Ser Arg Thr Ser Ala Met Ala Ser

1 10 15

Val Gly Arg Ala Gly Arg Gly Gly Lys Gly Asp Gly Gly Lys Gly Glu 20 25 30

Gly Ser Leu Ala Arg Arg Ala Trp Arg Gln Tyr Leu Leu Gln Leu Gln 35 40 45

Gln His Pro Leu Arg Thr Lys Met Ile Thr Ala Gly Cys Leu Ala Gly
50 60

Val Ser Asp Ser Val Ala Gln Lys Leu Ser Gly Phe Gln Lys Ile Glu 65 70 75 80
Lys Arg Arg Leu Leu Leu Lys Met Leu Phe Gly Phe Ala Tyr Gly Gly

85 90 95
Pro Phe Gly His Phe Leu His Lys Ile Leu Asp Tyr Ile Phe Gln Gly

100 105 110
Lys Lys Asp Thr Lys Thr Ile Ala Lys Lys Val Leu Leu Glu Gln Val

115 120 125
Thr Ser Ser Pro Trp Asn Asn Ile Leu Phe Leu Phe Tyr Tyr Gly Tyr
130 135 140

130 135 140

Val Val Glu Arg Arg Pro Leu Lys Glu Val Thr Thr Arg Val Lys Lys

145 150 155 160
Gln Tyr Pro Ser Val Gln Leu Ser Ala Trp Met Phe Trp Pro Ile Val

165 170 175
Gly Trp Ile Asn His Gln Tyr Met Pro Leu Gln Phe Arg Val Ile Phe

His Ser Phe Val Ala Cys Cys Trp Gly Ile Phe Leu Asn Leu Arg Ala
195 200 205

Arg Ala Met Ser Leu Lys Gln Ala 210 215

- (2) INFORMATION FOR SEQ ID NO:374:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 203 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..203
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482133

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374: Met Ala Ser Val Gly Arg Ala Gly Arg Gly Gly Lys Gly Asp Gly Gly 10 Lys Gly Glu Gly Ser Leu Ala Arg Arg Ala Trp Arg Gln Tyr Leu Leu Gln Leu Gln Gln His Pro Leu Arg Thr Lys Met Ile Thr Ala Gly Cys Leu Ala Gly Val Ser Asp Ser Val Ala Gln Lys Leu Ser Gly Phe Gln 55 Lys Ile Glu Lys Arg Arg Leu Leu Leu Lys Met Leu Phe Gly Phe Ala Tyr Gly Gly Pro Phe Gly His Phe Leu His Lys Ile Leu Asp Tyr Ile 90 Phe Gln Gly Lys Lys Asp Thr Lys Thr Ile Ala Lys Lys Val Leu Leu 105 Glu Gln Val Thr Ser Ser Pro Trp Asn Asn Ile Leu Phe Leu Phe Tyr 120 Tyr Gly Tyr Val Val Glu Arg Arg Pro Leu Lys Glu Val Thr Thr Arg 135 Val Lys Lys Gln Tyr Pro Ser Val Gln Leu Ser Ala Trp Met Phe Trp 150 155 Pro Ile Val Gly Trp Ile Asn His Gln Tyr Met Pro Leu Gln Phe Arg 165 170 Val Ile Phe His Ser Phe Val Ala Cys Cys Trp Gly Ile Phe Leu Asn 180 185 Leu Arg Ala Arg Ala Met Ser Leu Lys Gln Ala 195 200

- (2) INFORMATION FOR SEQ ID NO:375:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 161 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..161
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482134
- Lys Leu Ser Gly Phe Gln Lys Ile Glu Lys Arg Arg Leu Leu Lys 20 25 30
- Met Leu Phe Gly Phe Ala Tyr Gly Gly Pro Phe Gly His Phe Leu His 35 40 45
- Lys Ile Leu Asp Tyr Ile Phe Gln Gly Lys Lys Asp Thr Lys Thr Ile 50 55 60
- Ala Lys Lys Val Leu Leu Glu Gln Val Thr Ser Ser Pro Trp Asn Asn 65 70 75 80
- Ile Leu Phe Leu Phe Tyr Tyr Gly Tyr Val Val Glu Arg Arg Pro Leu
  85 90 95
- Lys Glu Val Thr Thr Arg Val Lys Lys Gln Tyr Pro Ser Val Gln Leu 100 105 110
- Ser Ala Trp Met Phe Trp Pro Ile Val Gly Trp Ile Asn His Gln Tyr
  115 120 125
- Met Pro Leu Gln Phe Arg Val Ile Phe His Ser Phe Val Ala Cys Cys
  130 135 140
- Trp Gly Ile Phe Leu Asn Leu Arg Ala Arg Ala Met Ser Leu Lys Gln
  145 150 155 160

Ala

- (2) INFORMATION FOR SEQ ID NO:376:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 533 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..533
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482135
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:376: 60 cgaaaaatgg attcattcag acgtgatcct tggcccttga attgggagac cttctgcaga gacgcacaag cccaggggga aaaaagtttc agtcagtaag ggagaataag cattgcaaac 120 cgaaacagag gtaatcaata aaggatggga aacatggata aggatcaatt agagcatcta 180 accccagcat tccaaccaat gactcgttga atcgtcgatc taggaatact ctgatattac 240 atctgctctg ccattcataa tctgttcacg ttctacaacg aakcctataa gttgaagcaa 300 ccgcagatgc aattgtagga gtattttgtt tcttttctgt gatttggctt cagcacaaac 360 420 agcacaaggg catctccaaa gacagtcagc taccgtgacc gtgaggcatg acatcgttta ttcagtgaag gaaaaaaaa tgcaacgagc agctaaggtc gcaagtaccc aagctagtca 480 tegetaaget gtaastgaga gtatgtatea gtttetaeag acgaetgtgg aag
- (2) INFORMATION FOR SEQ ID NO:377:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 32 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..32
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482136
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

Arg Lys Met Asp Ser Phe Arg Arg Asp Pro Trp Pro Leu Asn Trp Glu

1 5 10 15

Thr Phe Cys Arg Asp Ala Gln Ala Gln Gly Glu Lys Ser Phe Ser Gln
20 25 30

- (2) INFORMATION FOR SEQ ID NO:378:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 30 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..30
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482137
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

- (2) INFORMATION FOR SEQ ID NO:379:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..450
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482142
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:379: 60 attogaattt egaaegeege eggtegetee etgtteeeta geteteteet eegeggetee geeteeggee tecaeggttt egeaggeaga gatgaagaag gegteegegg egtegegeta 120 180 egeggeetae gaeteceegt eccettegee gegeegegeg gsenetteeg eggeegeege 240 gaccccggga gcagcgcacg gcagcagccg cgccctggtg gtcgcgggga gatccggccg 300 cgatctactg ggcgccaagc cgcaagccca cggcaaccta ggctccgtgc tacggcggct catctccatg gacaagaagc cgccttcctc caagaaccag ctcccggttc cccctgcmgc 360 mgcmgccgca gcagcagcag cagcgaagaa caacggtggc gggaagctgc mggggctgtm 420 gcggaagttg ttccagaaag cctcgtccac
- (2) INFORMATION FOR SEQ ID NO:380:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 150 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..150
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482143
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:
- 20 25 30
  Glu Gly Val Arg Gly Val Ala Leu Arg Gly Leu Arg Leu Pro Val Pro
- 35 40 45
  Phe Ala Ala Pro Arg Xaa Xaa Phe Arg Gly Arg Arg Asp Pro Gly Ser
  50 55 60
- Ser Ala Arg Gln Gln Pro Arg Pro Gly Gly Arg Gly Glu Ile Arg Pro
  65 70 75 80
- Arg Ser Thr Gly Arg Gln Ala Ala Ser Pro Arg Gln Pro Arg Leu Arg 85 90 95
- Ala Thr Ala Ala His Leu His Gly Gln Glu Ala Ala Phe Leu Gln Glu 100 105 110
- Pro Ala Pro Gly Ser Pro Cys Xaa Xaa Xaa Arg Ser Ser Ser Ser Ser 115 120 125
- Glu Glu Gln Arg Trp Arg Glu Ala Xaa Gly Ala Xaa Ala Glu Val Val
  130 135 140
- Pro Glu Ser Leu Val His
  - 45 150
- (2) INFORMATION FOR SEQ ID NO:381:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 149 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..149
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482144
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:
- Phe Glu Phe Arg Thr Pro Pro Val Ala Pro Cys Ser Leu Ala Leu Ser 1 5 10 15
- Ser Ala Ala Pro Pro Pro Ala Ser Thr Val Ser Gln Ala Glu Met Lys
- Lys Ala Ser Ala Ala Ser Arg Tyr Ala Ala Tyr Asp Ser Pro Ser Pro 35 40 45
- Ser Pro Arg Arg Ala Xaa Xaa Ser Ala Ala Ala Ala Thr Pro Gly Ala 50 55 60
- Ala His Gly Ser Ser Arg Ala Leu Val Val Ala Gly Arg Ser Gly Arg 65 70 75 80
- Asp Leu Gly Ala Lys Pro Gln Ala His Gly Asn Leu Gly Ser Val
- Leu Arg Arg Leu Ile Ser Met Asp Lys Lys Pro Pro Ser Ser Lys Asn 100 105 110
- Gln Leu Pro Val Pro Pro Xaa Xaa Xaa Ala Ala Ala Ala Ala Ala Ala 115 120 125
- Lys Asn Asn Gly Gly Gly Lys Leu Xaa Gly Leu Xaa Arg Lys Leu Phe 130 135 140
- Gln Lys Ala Ser Ser
- 145

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- (2) INFORMATION FOR SEQ ID NO:382:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 119 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..119
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482145
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:
- Met Lys Lys Ala Ser Ala Ala Ser Arg Tyr Ala Ala Tyr Asp Ser Pro 1 5 10 15
- Ser Pro Ser Pro Arg Arg Ala Xaa Xaa Ser Ala Ala Ala Thr Pro 20 25 30
- Gly Ala Ala His Gly Ser Ser Arg Ala Leu Val Val Ala Gly Arg Ser 35 40 45
- Gly Arg Asp Leu Leu Gly Ala Lys Pro Gln Ala His Gly Asn Leu Gly
  50 60
- Ser Val Leu Arg Arg Leu Ile Ser Met Asp Lys Lys Pro Pro Ser Ser 65 70 75 80
- Lys Asn Gln Leu Pro Val Pro Pro Xaa Xaa Xaa Ala Ala Ala Ala Ala Ala 85 90 95
- Ala Ala Lys Asn Asn Gly Gly Gly Lys Leu Xaa Gly Leu Xaa Arg Lys
  100 105 110
- Leu Phe Gln Lys Ala Ser Ser 115
- (2) INFORMATION FOR SEQ ID NO:383:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 434 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:

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- (A) NAME/KEY: -
- (B) LOCATION: 1..434
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482153
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:383: gaagggggga gcgctgcaga tagtctcaag tccgcttcct gtgctggtcc gccgtcgctc 60 tetgttegee gteegeegtg cegtecatee geeegetee acgeagettg ggaataacgg 120 atcgccgctc gctatccctc gacctcggta gaaagttcca aacgaccacg acgtcctctt 180 ggtctcccgc tgtcatcagt ccgcaattcc gcatttctat tgtccttttt ccgtcgcatc 240 300 cqtttcqtct ctttqctcqc atctggcctc aagcccctca ggcctcagct caccaccacg aaccaaccga cagaaagagg gacgaatggc gageteteag tgetgegata accegeegge 360 cctgaacccg gcctgcgggg agggcaaggt cgtcgacagc ttcggcgggc tcaaggccta 420 cqtyqccqqc cccq
- (2) INFORMATION FOR SEQ ID NO:384:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 38 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..38
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482154
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

Glu Gly Gly Ser Ala Ala Asp Ser Leu Lys Ser Ala Ser Cys Ala Gly 10 Pro Pro Ser Leu Ser Val Arg Arg Pro Pro Cys Arg Pro Ser Ala Pro 25

Leu His Ala Ala Trp Glu 35

20

- (2) INFORMATION FOR SEQ ID NO:385:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 49 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..49
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482155
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

Lys Gly Gly Ala Leu Gln Ile Val Ser Ser Pro Leu Pro Val Leu Val 10

Arg Arg Arg Ser Leu Phe Ala Val Arg Arg Ala Val His Pro Pro Arg 25 30

Ser Thr Gln Leu Gly Asn Asn Gly Ser Pro Leu Ala Ile Pro Arg Pro 35 40

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- (2) INFORMATION FOR SEQ ID NO:386:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 36 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide

- (B) LOCATION: 1..36
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482156
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

Met Ala Ser Ser Gln Cys Cys Asp Asn Pro Pro Ala Leu Asn Pro Ala 1 5 10 15

Cys Gly Glu Gly Lys Val Val Asp Ser Phe Gly Gly Leu Lys Ala Tyr 20 25 30

Xaa Ala Gly Pro

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- (2) INFORMATION FOR SEQ ID NO:387:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 633 base pairs
      - (B) TYPE: nucleic acid
      - (C) STRANDEDNESS: single
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..633
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482157
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:387: 60 agagttcagg ggggagccag cgaagacaag acaagccagg ccagcggcgg aggagaggga gagagagaga gagagagcac gcgacagtag gcaggagggc gaggaggagc ttgtagaggg 120 180 ttaaggaagg cgaccgccat gggggactcc agcggctccg tgtcggtcga cgtcgagcgg 240 atcttcttcg gcggcaagga gcatcgagta agaacgaggc atggctctct ttcggtttct 300 gtgtatggag acgaggacaa gcccgcgctc gtaacttatc cggatgtagc cttaaatcac 360 atgtettget tecaaggatt gttettetgt eeggaggetg egteeetgtt getteaeagt 420 ttctgcgtgt accacatcac acctcaagga cacgagttgg gagcagctcc gatttcagct gatgtgcctg tgccatctgt cgacgacctt gcagatcagg ttgctgatgt cctcgatttt 480 ttcagtttag ggtctgtcat gtgcttgggt gtcactgctg gtgcctatgt tctcaccctc 540 600 tttgcaacta agtatcggga gagggttctt ggcctcatgt tggtttcacc tgtatgcaaa gcccctcct ggagcgagtg gctgtataat aag
- (2) INFORMATION FOR SEQ ID NO:388:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 165 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..165
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482158
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:
- Met Gly Asp Ser Ser Gly Ser Val Ser Val Asp Val Glu Arg Ile Phe 1 5 10 15
- Phe Gly Gly Lys Glu His Arg Val Arg Thr Arg His Gly Ser Leu Ser 20 25 30
- Val Ser Val Tyr Gly Asp Glu Asp Lys Pro Ala Leu Val Thr Tyr Pro 35 40 45
- Asp Val Ala Leu Asn His Met Ser Cys Phe Gln Gly Leu Phe Phe Cys 50 55 60
- Pro Glu Ala Ala Ser Leu Leu His Ser Phe Cys Val Tyr His Ile
  65 70 75 80
- Thr Pro Gln Gly His Glu Leu Gly Ala Ala Pro Ile Ser Ala Asp Val 85 90 95
- Pro Val Pro Ser Val Asp Asp Leu Ala Asp Gln Val Ala Asp Val Leu
- Asp Phe Phe Ser Leu Gly Ser Val Met Cys Leu Gly Val Thr Ala Gly

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|--|------|--|--|--|--|--|
| 115 120 125  |      |  |  |  |  |  |
| Ala Tyr Val Leu Thr Leu Phe Ala Thr Lys Tyr Arg Glu Arg Val Le   | eu   |  |  |  |  |  |
| 130 135 140 Gly Leu Met Leu Val Ser Pro Val Cys Lys Ala Pro Ser Trp Ser G  | 1 11 |  |  |  |  |  |
| 145 150 155 16   | 50   |  |  |  |  |  |
| Trp Leu Tyr Asn Lys<br>165   |      |  |  |  |  |  |
| (2) INFORMATION FOR SEQ ID NO:389:   |      |  |  |  |  |  |
| <ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 111 amino acids</li></ul>  |      |  |  |  |  |  |
| (B) TYPE: amino acid   |      |  |  |  |  |  |
| (C) STRANDEDNESS:  |      |  |  |  |  |  |
| (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide   |      |  |  |  |  |  |
| (ix) FEATURE:  |      |  |  |  |  |  |
| (A) NAME/KEY: peptide  |      |  |  |  |  |  |
| (B) LOCATION: 1111 (D) OTHER INFORMATION: / Ceres Seq. ID 1482159  |      |  |  |  |  |  |
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:  |      |  |  |  |  |  |
| Met Ser Cys Phe Gln Gly Leu Phe Phe Cys Pro Glu Ala Ala Ser Le   | eu   |  |  |  |  |  |
| 1 5 10 15 The For Pho Core Well Many Wis The The Part Cl.                                    | •    |  |  |  |  |  |
| Leu Leu His Ser Phe Cys Val Tyr His Ile Thr Pro Gln Gly His Gl<br>20 25 30   | _u   |  |  |  |  |  |
| Leu Gly Ala Ala Pro Ile Ser Ala Asp Val Pro Val Pro Ser Val As   | 3p   |  |  |  |  |  |
| 35 40 45   |      |  |  |  |  |  |
| Asp Leu Ala Asp Gln Val Ala Asp Val Leu Asp Phe Phe Ser Leu Gl 50 55 60  | -У   |  |  |  |  |  |
| Ser Val Met Cys Leu Gly Val Thr Ala Gly Ala Tyr Val Leu Thr Le   |      |  |  |  |  |  |
| 65 $70$ $75$ $80$ Phe Ala Thr Lys Tyr Arg Glu Arg Val Leu Gly Leu Met Leu Val Se   |      |  |  |  |  |  |
| 85 90 95   |      |  |  |  |  |  |
| Pro Val Cys Lys Ala Pro Ser Trp Ser Glu Trp Leu Tyr Asn Lys 100 105 110  |      |  |  |  |  |  |
| 100 105 110 (2) INFORMATION FOR SEQ ID NO:390:   |      |  |  |  |  |  |
| (i) SEQUENCE CHARACTERISTICS:  |      |  |  |  |  |  |
| (A) LENGTH: 461 base pairs   |      |  |  |  |  |  |
| (B) TYPE: nucleic acid (C) STRANDEDNESS: single  |      |  |  |  |  |  |
| (D) TOPOLOGY: linear   |      |  |  |  |  |  |
| (ii) MOLECULE TYPE: DNA (genomic)  |      |  |  |  |  |  |
| (ix) FEATURE: (A) NAME/KEY: ~  |      |  |  |  |  |  |
| (B) LOCATION: 1461   |      |  |  |  |  |  |
| (D) OTHER INFORMATION: / Ceres Seq. ID 1482164   |      |  |  |  |  |  |
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:  |      |  |  |  |  |  |
| ctcgagtcga gcgaaccgaa gccgaacata cccacccatc gtctcgtcgt ctcgtcg<br>gtgggcgtgg ctctctctcc ccccacctcc tcttttaaga cgacgccatc gccagcc | lede |  |  |  |  |  |
| cotcoctogo ogtooggogo ogtootoott ogtoottooo totoatoaca gtttooa   |      |  |  |  |  |  |
| egegagggge tegegegege geceateceg geegategae teacgaatte gegegeg   | gatc |  |  |  |  |  |
| atattegtge aagggeatee eegeacggee ggaageacgg aateaettee eegeece   | cca  |  |  |  |  |  |

attcccgggc tcctcggcgc mgatccctcg ccggtgttcg ctttccggcg gtttccgcgg

cgtgtcgcgg gcaggcgcag gcggctcggc tcggttgttt cctcctcgtg ccatcatcca

- (2) INFORMATION FOR SEQ ID NO:391:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 153 amino acids

tggaggcgaa sagcgcmcgc ggcacggcgg ggagaggagg c

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..153
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482165
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:
- Leu Glu Ser Ser Glu Pro Lys Pro Asn Ile Pro Thr His Arg Leu Val
  1 5 10 15
- Val Ser Ser Arg Val Gly Val Ala Leu Ser Pro Pro Thr Ser Ser Phe
  20 25 30
- Lys Thr Thr Pro Ser Pro Ala Gly Pro Pro Ser Pro Ser Gly Ala Val
- Leu Leu Arg Pro Ser Leu Ser Ser Gln Phe Pro Pro Arg Glu Gly Leu 50 55 60
- Ala Arg Ala Pro Ile Pro Ala Asp Arg Leu Thr Asn Ser Arg Ala Ile 65 70 75 80
- Ile Phe Val Gln Gly His Pro Arg Thr Ala Gly Ser Thr Glu Ser Leu
  85 90 95
- Pro Arg Pro Pro Ile Pro Gly Leu Leu Gly Xaa Asp Pro Ser Pro Val 100 105 110
- Phe Ala Phe Arg Arg Phe Pro Arg Arg Val Ala Gly Arg Arg Arg 115 120 125
- Leu Gly Ser Val Val Ser Ser Cys His His Pro Trp Arg Arg Xaa 130 135 140
- Ala Xaa Ala Ala Arg Arg Gly Glu Glu
  - 145 150
- (2) INFORMATION FOR SEQ ID NO:392:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 153 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..153
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482166
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:
- Ser Ser Arg Ala Asn Arg Ser Arg Thr Tyr Pro Pro Ile Val Ser Ser 1 10 15
- Ser Arg Arg Ala Trp Ala Trp Leu Ser Leu Pro Pro Pro Pro Leu Leu 20 25 30
- Arg Arg His Arg Gln Pro Ala Leu Pro Arg Arg Pro Ala Pro Ser 35 40 45
  Ser Phe Val Leu Pro Ser His His Ser Phe His Leu Ala Arg Gly Ser
- 50 55 60
  Arg Ala Arg Pro Ser Arg Pro Ile Asp Ser Arg Ile Arg Ala Arg Ser
- 65 70 75 11e Asp Ser Arg 11e Arg Ala Arg Ser
- Tyr Ser Cys Lys Gly Ile Pro Ala Arg Pro Glu Ala Arg Asn His Phe 85 90 95
- Pro Ala Pro Gln Phe Pro Gly Ser Ser Ala Xaa Ile Pro Arg Arg Cys 100 105 110
- Ser Leu Ser Gly Gly Phe Arg Gly Val Ser Arg Ala Gly Ala Gly Gly 115 120 125
- Ser Ala Arg Leu Phe Pro Pro Arg Ala Ile Ile His Gly Gly Glu Xaa 130 135 140
- Arg Xaa Arg His Gly Gly Glu Arg Arg
- 145 150
- (2) INFORMATION FOR SEQ ID NO:393:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 615 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..615
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482167
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

aaaaccaaaa agaagggttg ctcccaacgc aacgaactgc ctttcccgtc agcagcagca gcagctgcys entgetgetg tecateteca tectececat egecegactg gatttetece 120 togaattogo acctooggoo toccocotoa ottogotgtg totoatcaac googgoatca 180 ccgcgaggac tgggccagcg ctccctccct ttctcctccc tccgccttta ttgctgacgg 240 cgacgactgg gcgagctctg ccgccgctct gcgctaggtg cccaggtctt cctcgggcac 300 ttcaccggcg acgagcaccc atcaggagcg aaatggacga ggctgttcct gctttggcta 360 ctggccaagc ttcaaccgac ggcgtgacag agcagcctgt gaatgtgtac atatgggaca 420 tggatgagac actcattttg ctcaagtcac ttctggatgg ctcatatgct ggggcttttg 480 atggcctcaa ggatcatgag aaaagtactg aaataggaaa gcgatgggag aacctcattc 540 ttgaactctg tgatgagcac ttcttttatg aggagattga gaactacaat gaaccctatc 600 tcaatgcctt gaatg

- (2) INFORMATION FOR SEQ ID NO:394:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 204 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..204
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482168
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:
- Asn Gln Lys Glu Gly Leu Leu Pro Thr Gln Arg Thr Ala Phe Pro Val  $1 \ 5 \ 10 \ 15$  Ser Ser Ser Ser Ser Cys Xaa Xaa Leu Leu Ser Ile Ser Ile Leu Pro
  - 20 25 30
- Ile Ala Arg Leu Asp Phe Ser Leu Glu Phe Ala Pro Pro Ala Ser Pro
  35 40 45
- Leu Thr Ser Leu Cys Leu Ile Asn Ala Gly Ile Thr Ala Arg Thr Gly
  50 55 60
  Pro Ala Leu Pro Pro Phe Leu Leu Pro Pro Leu Leu Leu Thr Ala
- 65 70 75 80
  Thr Thr Gly Arg Ala Leu Pro Pro Leu Cys Ala Arg Cys Pro Gly Leu
- 85 90 95 Pro Arg Ala Leu His Arg Arg Arg Ala Pro Ile Arg Ser Glu Met Asp
- 100 105 110
  Glu Ala Val Pro Ala Leu Ala Thr Gly Gln Ala Ser Thr Asp Gly Val
- 115 120 125 Thr Glu Gln Pro Val Asn Val Tyr Ile Trp Asp Met Asp Glu Thr Leu
- 130 135 140
  Ile Leu Leu Lys Ser Leu Leu Asp Gly Ser Tyr Ala Gly Ala Phe Asp
- 145 150 155 160
- Gly Leu Lys Asp His Glu Lys Ser Thr Glu Ile Gly Lys Arg Trp Glu
  165 170 175
  Asp Leu Lle Leu Gly Lys Gly Leu Gly Lys Gl
- Asn Leu Ile Leu Glu Leu Cys Asp Glu His Phe Phe Tyr Glu Glu Ile 180 185 190
- Glu Asn Tyr Asn Glu Pro Tyr Leu Asn Ala Leu Asn

195 200 (2) INFORMATION FOR SEQ ID NO:395: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 508 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..508 (D) OTHER INFORMATION: / Ceres Seq. ID 1482169 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:395: 60 attcgataac caagaacaaa ccattgttgg acgcgttccc ctcctgcacg caacctcatc 120 tegteeteea gateeaggat ggeegteete ettgagaeet tgeeteeeg agtgeteteg 180 gtgagctact ttgtttcgat ttatcaggaa atccgtttgc ttcatgttgt gcaggctcat 240 atctgattgc tggattcggc aaacccgcgt tggatcctgt atcggttagt ccttgcctgc aaggttcttg ttgtwttgtt ttggtggtcg agcatcgcat gttctgcttc tggatccaga 300 tctqqaqaaa tcqcqaaqtc gtcqtcqttc qgttcggaqc ggatctgagg cgacgataga 360 tggaggcggc gggatctctc ggtctgcagt cctgctccac ctcgatggat gatgtctctg 420 cgctgataat tattggatca atttcgataa ttatwagtag atctatgaga tatgccgcgt 480 qqaaqaqqcq aqqtaaqctq caqcatgt (2) INFORMATION FOR SEQ ID NO:396: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 40 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..40 (D) OTHER INFORMATION: / Ceres Seq. ID 1482170 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:396: Phe Asp Asn Gln Glu Gln Thr Ile Val Gly Arg Val Pro Leu Leu His 10 Ala Thr Ser Ser Arg Pro Pro Asp Pro Gly Trp Pro Ser Ser Leu Arg 20 25 Pro Cys Leu Pro Glu Cys Ser Arg 35 (2) INFORMATION FOR SEQ ID NO:397: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 35 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..35 (D) OTHER INFORMATION: / Ceres Seq. ID 1482171 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:397: Met Ala Val Leu Glu Thr Leu Pro Pro Arg Val Leu Ser Val Ser

1.0

Tyr Phe Val Ser Ile Tyr Gln Glu Ile Arg Leu Leu His Val Val Gln 25

Ala His Ile 35

(2) INFORMATION FOR SEQ ID NO:398:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 49 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..49
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482172
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

Asp Asp Val Ser Ala Leu Ile Ile Ile Gly Ser Ile Ser Ile Ile Xaa 20 25 30

Ser Arg Ser Met Arg Tyr Ala Ala Trp Lys Arg Arg Gly Lys Leu Gln
35 40 45

His

- (2) INFORMATION FOR SEQ ID NO:399:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 597 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..597
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482177
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:399: 60 aatcctaccc cgcgggggga attctctctc agttctctcg gcgacgactg ggagaccgcc qccqccqcca tcctactcca ggtgccctga gaactcgatc ggagtcttcg ctggcgacga 120 acaccacca gctatcaggt gtacaaccat gtacttcacc gtgtccgccc ctgcaatgtc 180 tctatqatcc tccaqctacq gtagacqccc cgttcgctag ctgaggacct cctggttcct 240 qtqaqcaqqc qqcqttqtta qctqctqcct tcaaqcatqc agagacccaa cgcgccgtcg 300 360 gcttgcgcta ccatcacctt cgcggaggct ctaaggaggg agatggagta ccgcaagtgg 420 gtggagagga cccaccaca tctgctcgtc ggaatctgcg gasccctgaa atgcagagag atttcagtgc aggaccagta cctgatgcga tcaagagaaa actagctgcc gagaccagtg 480 tgcctccaca acaatcaagt ttcagctgtg taactggaca gaagcagccc caaaactggt 540 accccacaaa gaaaaaggtg aaagttccac atcttccgtc gcagattctg cagtgtc
- (2) INFORMATION FOR SEQ ID NO:400:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 61 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..61
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482178
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:
- Gly Arg Pro Pro Pro Pro Ser Tyr Ser Arg Cys Pro Glu Asn Ser 20 25 30
- Ile Gly Val Phe Ala Gly Asp Glu His Pro Pro Ala Ile Arg Cys Thr 35 40 45

Thr Met Tyr Phe Thr Val Ser Ala Pro Ala Met Ser Leu 55 (2) INFORMATION FOR SEQ ID NO:401: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 73 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..73 (D) OTHER INFORMATION: / Ceres Seq. ID 1482179 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:401: Ser Tyr Pro Ala Gly Gly Ile Leu Ser Gln Phe Ser Arg Arg Arg Leu 10 Gly Asp Arg Arg Arg His Pro Thr Pro Gly Ala Leu Arg Thr Arg 25 20 Ser Glu Ser Ser Leu Ala Thr Asn Thr His Gln Leu Ser Gly Val Gln 40 Pro Cys Thr Ser Pro Cys Pro Pro Leu Gln Cys Leu Tyr Asp Pro Pro 55 Ala Thr Val Asp Ala Pro Phe Ala Ser 70 (2) INFORMATION FOR SEQ ID NO:402: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 62 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..62 (D) OTHER INFORMATION: / Ceres Seq. ID 1482180 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:402: Met Gln Arg Pro Asn Ala Pro Ser Ala Cys Ala Thr Ile Thr Phe Ala 10 Glu Ala Leu Arg Arg Glu Met Glu Tyr Arg Lys Trp Val Glu Arg Thr 25 30 His Pro His Leu Leu Val Gly Ile Cys Gly Xaa Leu Lys Cys Arg Glu 40 Ile Ser Val Gln Asp Gln Tyr Leu Met Arg Ser Arg Glu Asn 55 50 (2) INFORMATION FOR SEQ ID NO:403: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 576 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..576 (D) OTHER INFORMATION: / Ceres Seq. ID 1482188

(xi)SEQUENCE DESCRIPTION:SEQ ID NO:403:aggattcaca agtgctcgtagcaaatctacaaaatccccaaccgcctctcaacaaagtctccccacggaggtacacagctacgcgcaaaccgcgtctcgcgcgaagaatccgcatttccccttccccgcaccgcaccgcacccaacccccgtcggagagagagatggcatcggtggcgga

gatgcagccc ctcgcgccgg cggggtaccg cscgcgccgg agatgaagga gaaggtggag 240 gcgtcggtgg tggacctgga ggccgggacc ggggagacgc tgtacccggg gatctcgcgc 300 ggggagageg ccctccgatg gggcttcgtc cgcaaggtct acggcatcct cgctgcgcas 360 tgctcctcac caccgccgtc tccgcmctca ccgttctcca ccccaccctc aacgccacgc 420 tctccgactc cccgggmctm gcgctmgtrc tcgcmgtmmt gcccttmatc ctgatgatcc 480 540 cattgtatca ttatcagcac aagcacccac acaattccgt tttcctgggt ctgttcacgt

- (2) INFORMATION FOR SEQ ID NO:404:
- tggtgcttga gcttcagcat cggcgtggct tgtgct (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 191 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..191
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482189
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

Asp Ser Gln Val Leu Val Ala Asn Leu Gln Asn Pro Gln Pro Pro Leu 10

Asn Lys Val Ser Pro Arg Arg Tyr Thr Ala Thr Arg Lys Pro Arg Leu 25

Ala Arg Arg Ile Arg Ile Ser Pro Ser Pro His Arg Thr Ala Pro Asn 40

Pro Arg Arg Glu Arg Trp His Arg Trp Arg Arg Cys Ser Pro Ser

Arg Arg Arg Gly Thr Xaa Arg Ala Gly Asp Glu Gly Glu Gly Gly

Val Gly Gly Pro Gly Gly Arg Asp Arg Gly Asp Ala Val Pro Gly 90

Asp Leu Ala Arg Gly Glu Arg Pro Pro Met Gly Leu Arg Pro Gln Gly 105

Leu Arg His Pro Arg Cys Ala Xaa Leu Leu Thr Thr Ala Val Ser Xaa 120

Leu Thr Val Leu His Pro Thr Leu Asn Ala Thr Leu Ser Asp Ser Pro 140 135

Xaa Xaa Ala Xaa Xaa Leu Xaa Xaa Xaa Pro Xaa Ile Leu Met Ile Pro 155 150

Leu Tyr His Tyr Gln His Lys His Pro His Asn Ser Val Phe Leu Gly 170 165 Leu Phe Thr Leu Val Leu Glu Leu Gln His Arg Arg Gly Leu Cys

- 185 180 (2) INFORMATION FOR SEQ ID NO:405:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 412 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..412
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482193
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

actocactot actocaccog ogcacaacag atogcacgoc toggttocot coactogacg 60 cttctcccgc tcctaacccc tagtaccttc gctcgctctg ccgcctccgc cgacgacgcg 120 ccagatccgc gcrsagtggt gtcctccgcc gcggatcgag ctcccgatcc gcgcagtggg 180 agtggcggcg agcgcaggag cgctcggccg ggggttccgc gaggctggag acggaggagg 240 aagggagcggtagttccgcggtggtagatccgccggtcctgtcgccggagatggactcat300ctgtcgagaagcaggggagcgtggcgctggatccggacgagcgcrcgccggcgtccgggaaaccaaggcctgcaccgagtgccacaccaccaagaccccgctctggcgcgg

- (2) INFORMATION FOR SEQ ID NO:406:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 88 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..88
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482194
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

Thr Pro Leu Tyr Ser Thr Arg Ala Gln Gln Ile Ala Arg Leu Gly Ser
1 5 10 15

Leu His Ser Thr Leu Leu Pro Leu Leu Thr Pro Ser Thr Phe Ala Arg 20 25 30

Ser Ala Ala Ser Ala Asp Asp Ala Pro Asp Pro Arg Xaa Val Val Ser

Ser Ala Ala Asp Arg Ala Pro Asp Pro Arg Ser Gly Ser Gly Glu

Arg Arg Ser Ala Arg Pro Gly Val Pro Arg Gly Trp Arg Arg Arg 65 70 75 80

Lys Gly Ala Val Val Pro Arg Trp

85

- (2) INFORMATION FOR SEQ ID NO:407:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 486 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..486
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482205
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:407: attcattacc ggaagagaaa aaagtaactc ggaaaagaag gagacgccga aaattcgaaa 60 120 gecegagea agategaate catgaggaag tgggtegteg ageacaaget eegageegta 180 gttgcctctg gctaggtggg atcagcagtt cgatcgccta caactggtcg cggcccaata 240 tgaagcctag cgtcaagatc atccacgcaa ggttgcatgc tcaagctcta accctggctg 300 cattagttgg ttctgcatgc gtggagtact atgaccagaa gtatggttct tctgggccaa 360 aggtggacaa atacacaagc caatacctgg cccattcgca taaagattaa aggtcgccat 420 gttggttcct gcatgccgga ttaattttgg gctcatctcg ggttgctcat gagtcatgac 480
- (2) INFORMATION FOR SEQ ID NO:408:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 135 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

ccqccc

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..135
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482206

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408: Ser Leu Pro Glu Glu Lys Lys Val Thr Arg Lys Arg Arg Arg Arg 10 Lys Phe Glu Arg Gly Gly Glu Ser Lys Ala Asp Gly Gly Pro Gly 25 Glu Ser Lys Ala Asn Gly Gly Gly Pro Glu Gln Asp Arg Ile His Glu 40 Glu Val Gly Arg Arg Ala Gln Ala Pro Ser Arg Ser Cys Leu Trp Leu 55 Gly Gly Ile Ser Ser Ser Ile Ala Tyr Asn Trp Ser Arg Pro Asn Met 75 7.0 Lys Pro Ser Val Lys Ile Ile His Ala Arg Leu His Ala Gln Ala Leu 90 85 Thr Leu Ala Ala Leu Val Gly Ser Ala Cys Val Glu Tyr Tyr Asp Gln 110 105 100 Lys Tyr Gly Ser Ser Gly Pro Lys Val Asp Lys Tyr Thr Ser Gln Tyr 120 115

115 l Leu Ala His Ser His Lys Asp

- (2) INFORMATION FOR SEQ ID NO:409:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 778 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..778
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482207
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:409: qqcaqaqqca cqqaqcctca actccactqc cctqctqcaa ttttttctct gttaqtcqat 60 120 caqccaqcqa qtqaaaccaa gaaattcatg gcgggttgaa ggagacacgg gagggaggta 180 tgcatgttcc tggcgaggtg ctcccagcgg cgtagtcacc agtctgttga ctcatgggga 240 catqqtcata gtcggcgtcg gcttgctcga gtgccagcag caaccatggc cctattcgca 300 qccatagggg gtcagccttc ttgcgctctc atggcatcgg tggagctgat agagggtctt 360 ggggggctcc ccgtcgacgg gtctccagcg gccactgcag caccacgaag cacaatgttg 420 ttqcccqqqt ctqccaqgqq ggcqctqtcg aaggqtcgac ccaagaagcg gatctcgatg 480 ttqaqtqqcq caqcqtqctc cactttgcat ctcccagatg tggtcctcca ccggcggcga 540 gcccgggtgg aggtggagct cttgtggctg gaaggcggag gggaggaatg gatcggtaga 600 tqqqaqqqaq aqqaaggtct tscggtgggg aggaatacac ggatggcgat tcgggagggg 660 acgacggcga tctactaggg tttagtttgg gcgtgagggg atgagggcgg atggcgatct 720 ggagacaatg acggcggttc agattagggt tgcgagcggc tcgatgggcg cgtacgtggg gtggatccga gcggtccgcc gcgtcacaac tcaactattt tttttatgta aaacggat
- (2) INFORMATION FOR SEQ ID NO:410:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 164 amino acids(B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..164
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482208
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:
- Met Phe Leu Ala Arg Cys Ser Gln Arg Arg Ser His Gln Ser Val Asp 1 5 10 15 Ser Trp Gly His Gly His Ser Arg Arg Leu Ala Arg Val Pro Ala

25 Ala Thr Met Ala Leu Phe Ala Ala Ile Gly Gly Gln Pro Ser Cys Ala 40 Leu Met Ala Ser Val Glu Leu Ile Glu Gly Leu Gly Gly Leu Pro Val 55 Asp Gly Ser Pro Ala Ala Thr Ala Ala Pro Arg Ser Thr Met Leu Leu 70 75 Pro Gly Ser Ala Arg Gly Ala Leu Ser Lys Gly Arg Pro Lys Lys Arg 9.0 Ile Ser Met Leu Ser Gly Ala Ala Cys Ser Thr Leu His Leu Pro Asp 105 Val Val Leu His Arg Arg Arg Ala Arg Val Glu Val Glu Leu Leu Trp 120 125 Leu Glu Gly Gly Glu Glu Trp Ile Gly Arg Trp Glu Gly Glu Glu 135 140 Gly Leu Xaa Val Gly Arg Asn Thr Arg Met Ala Ile Arg Glu Gly Thr 150 155 Thr Ala Ile Tyr

- (2) INFORMATION FOR SEQ ID NO:411:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 130 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..130
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482209

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411: Met Ala Leu Phe Ala Ala Ile Gly Gly Gln Pro Ser Cys Ala Leu Met

1 5 10 15
Ala Ser Val Glu Leu Ile Glu Gly Leu Gly Gly Leu Pro Val Asp Gly
20 25 30

Ser Pro Ala Ala Thr Ala Ala Pro Arg Ser Thr Met Leu Leu Pro Gly

Ser Ala Arg Gly Ala Leu Ser Lys Gly Arg Pro Lys Lys Arg Ile Ser

Met Leu Ser Gly Ala Ala Cys Ser Thr Leu His Leu Pro Asp Val Val 65 70 75 80

Leu His Arg Arg Arg Ala Arg Val Glu Val Glu Leu Leu Trp Leu Glu
85 90 95

Gly Gly Glu Glu Trp Ile Gly Arg Trp Glu Gly Glu Glu Gly Leu 100 105 110

Xaa Val Gly Arg Asn Thr Arg Met Ala Ile Arg Glu Gly Thr Thr Ala 115 120 125

Ile Tyr 130

- (2) INFORMATION FOR SEQ ID NO:412:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 115 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..115

(D) OTHER INFORMATION: / Ceres Seq. ID 1482210 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:412: Met Ala Ser Val Glu Leu Ile Glu Gly Leu Gly Gly Leu Pro Val Asp 10 Gly Ser Pro Ala Ala Thr Ala Ala Pro Arg Ser Thr Met Leu Leu Pro 25 Gly Ser Ala Arg Gly Ala Leu Ser Lys Gly Arg Pro Lys Lys Arg Ile 45 40 Ser Met Leu Ser Gly Ala Ala Cys Ser Thr Leu His Leu Pro Asp Val 60 55 Val Leu His Arg Arg Ala Arg Val Glu Val Glu Leu Leu Trp Leu 75 70 Glu Gly Gly Glu Glu Trp Ile Gly Arg Trp Glu Gly Glu Gly 90 Leu Xaa Val Gly Arg Asn Thr Arg Met Ala Ile Arg Glu Gly Thr Thr 110 105 100

Ala Ile Tyr 115

- (2) INFORMATION FOR SEQ ID NO:413:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 721 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..721
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482217
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:413: ategttggge eggegeaaac cetagtegee acateactge etecteacae catetgeetg 60 tggttcccat gtcatcctcc cccgtttgag gtcttcctgc tccttcagat ccgtctatgt 120 gtgtgtttgt cgtgcctgat actggctcgg aaggtattcc gatctgtttc ttcggtgccg 180 tatatttcgt tgcgattttg gttcggttct ttcttgctct tcgtgggtcg ttgctggata 240 acacggatcg ttgatgctgt tcaagaagta ctgcgttatc ttcctgatgc aagtgttagg 300 ccctcgttac gaaggettee tgacgacaca aatatettge tgagatecaa gtgcgcaact 360 totototttt ttototttot tttccgtatt tctcgccgtc tgctttttct cctctggatt 420 480 gaattttgcg tacagtttag tttttaccaa atgcaatcgt aacttacggg caggatggtt tcagcaacga agtaaaggag gagattattc cgtcaaccgt aaggtgccgc taagagcttt 540 agaatatgaa aggcattagt ggtaacaaga tttgatttgg ttaggtgtta gtacaaaaaa 600 atgagattcg attccaatgc tgttgggggt actgctagtg aatatggccg ggcatctatc 660 acggtgttgt atgtgtacga aataatgtct gctttcgata cggtaagttt tgctttaagt 720
- (2) INFORMATION FOR SEQ ID NO:414:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 153 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

20

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..153
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482218
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:
- Ile Val Gly Pro Ala Gln Thr Leu Val Ala Thr Ser Leu Pro Pro His 10 Thr Ile Cys Leu Trp Phe Pro Cys His Pro Pro Pro Phe Glu Val Phe

25

Leu Leu Leu Gln Ile Arg Leu Cys Val Cys Leu Ser Cys Leu Ile Leu 45

Ala Arg Lys Val Phe Arg Ser Val Ser Ser Val Pro Tyr Ile Ser Leu 55

Arg Phe Trp Phe Gly Ser Phe Leu Leu Phe Val Gly Arg Cys Trp Ile 80

Thr Arg Ile Val Asp 85

Ala Ser Val Arg Pro Ser Leu Arg Arg Leu Pro Asp 95

Ala Ser Val Arg Pro Ser Leu Arg Arg Leu Pro Asp Asp Thr Asn Ile 100

Leu Leu Arg Ser Lys Cys Ala Thr Ser Leu Phe Phe Leu Phe

115 120 125
Arg Ile Ser Arg Arg Leu Leu Phe Leu Leu Trp Ile Glu Phe Cys Val

130 135 140

- Gln Phe Ser Phe Tyr Gln Met Gln Ser 145 150
- (2) INFORMATION FOR SEQ ID NO:415:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 883 base pairs
    - (B) TYPE: nucleic acid(C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..883
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482219
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:415: acgtctgttg ctctctaccg gagacggatc agcgtgtcaa ctgacagccc tatgtccttc 60 gccgctttct catggccgtt tcgccgccgg ggcggggctg gcagcagtgg cgcaasaagt 120 ccgccgccac ggcagaggag gacgaggagc tgggcgtgac cccgcagctc ctcgacttcc 180 teeggaeget etegeeegae geetteaagg eegeegeaet eeageteeaa ggaggeteea 240 cggaggcggc cgccggncga cctcaccagc tggcaggagc ggcacgccgt gctcgtgcta 300 tccaaagcta aggaactcgc caagattcgg tatgatctgt gccctcggca cctgaaggat 360 aagcagttct ggaggatata cttcctgctc gccaagagtt acatctcacc gtatgaacta 420 cgtgccatac agaaggaaaa actcagacgg atggagacag aaaactgcaa gccaaaacaa 480 gtgatctctg ttgaggtgga gatgcaagaa tcgaagcgca ctagtctctc acaagcatca 540 gaagtagatc tagaatctca ggtttagttt tgcagttata gcttctaaca gatctagctt 600 aggtaacgca atcagtagcc cttttatgat tcctccacac accaaatagc tccacgagtt 660 cttcagatct tggatcgact ctcgctagac taccagtccg ctgtgtgctt ttgtgtactg 720 aaaccaagta ggtcctttcc tgcattacgc agcatatgtg cttgttggct gtgctccgat 780 ccactgacat gtaaatctag ggtatcttgc gcgtgaacaa aaacgactgc gtttcatgta 840 gctatagatt atgtcaactt cgattctgct gtgcatgtgt tgg
- (2) INFORMATION FOR SEQ ID NO:416:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 117 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..117
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482220
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:
- Arg Leu Leu Ser Thr Gly Asp Gly Ser Ala Cys Gln Leu Thr Ala 1 5 10 15 Leu Cys Pro Ser Pro Leu Ser His Gly Arg Phe Ala Ala Gly Ala Gly

0 25 30

Leu Ala Ala Val Ala Gln Xaa Val Arg Arg His Gly Arg Gly Gly Arg Gly Ala Gly Arg Asp Pro Ala Ala Pro Arg Leu Pro Pro Asp Ala Leu 55

Ala Arg Arg Leu Gln Gly Arg Arg Thr Pro Ala Pro Arg Arg Leu His 70 75

Gly Gly Arg Arg Xaa Thr Ser Pro Ala Gly Arg Ser Gly Thr Pro 90 85

Cys Ser Cys Tyr Pro Lys Leu Arg Asn Ser Pro Arg Phe Gly Met Ile 105 100 110

Cys Ala Leu Gly Thr 115

- (2) INFORMATION FOR SEQ ID NO:417:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 79 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..79
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482221

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

Met Ala Val Ser Pro Pro Gly Arg Gly Trp Gln Gln Trp Arg Xaa Lys 10

Ser Ala Ala Thr Ala Glu Glu Asp Glu Glu Leu Gly Val Thr Pro Gln 20 25

Leu Leu Asp Phe Leu Arg Thr Leu Ser Pro Asp Ala Phe Lys Ala Ala 40

Ala Leu Gln Leu Gln Gly Gly Ser Thr Glu Ala Ala Ala Xaa Arg Pro 55

His Gln Leu Ala Gly Ala Ala Arg Arg Ala Arg Ala Ile Gln Ser 70

- (2) INFORMATION FOR SEQ ID NO:418:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 732 base pairs
    - (B) TYPE: nucleic acid (C) STRANDEDNESS: single

    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..732
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482230
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

taaaggcatc gacaaaatct ataagcagct gacaaaaagc catacacatc cactcggagg 60 aacagcatat ttaaatctag aaaatgaaga cgaaccgttt cttaatggaa tcaagtacac 120 agctatgcca cctaccaagc ggtttagaga tatggaacag ttatccggtg gggagaagac 180 tgttgcagca ctggctttgc tttttgccat tcacagtttt aggccatcac cgttcttcat 240 attggacgaa gtagatgctg ctctggacaa tttaaatgtg gccaaggttg ccgggtttat 300 cagatcaaaa tcatgtgaac gtgttggtga tgaacaaggc agcgatggcg agagtggttt 360 tcagagcata gttatatctc tgaaggacag tttctatgac aaggccgagg cacttgttgg 420 tgtttatagg gactcagaac gaagttgctc gaggactctc accttcgacc tgagaaagta 480 tagggaatcg tgaagcagct tttgttgaat gtttgtacta tgtgtgtagt tgcctgctcc 540 atcagcttgc tagatagctg tcgtgagcct tcgatgtttt aactatctgt atactcctag 600 tcctacataa gtgctagctg aacaaggacc ctgaaatatt catttggtag gtggataact 660 gatgtttcga acacgcataa actttttac ctgttgtatg aagccatttc tccgaattac 720 tataatctgt tt

- (2) INFORMATION FOR SEQ ID NO:419:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 163 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..163
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482231
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:
- Lys Gly Ile Asp Lys Ile Tyr Lys Gln Leu Thr Lys Ser His Thr His  $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$
- Pro Leu Gly Gly Thr Ala Tyr Leu Asn Leu Glu Asn Glu Asp Glu Pro
  20 25 30
- Phe Leu Asn Gly Ile Lys Tyr Thr Ala Met Pro Pro Thr Lys Arg Phe 35 40 45
- Arg Asp Met Glu Gln Leu Ser Gly Glu Lys Thr Val Ala Ala Leu 50 55 60
- Ala Leu Leu Phe Ala Ile His Ser Phe Arg Pro Ser Pro Phe Phe Ile
  65 70 75 80
- Leu Asp Glu Val Asp Ala Ala Leu Asp Asn Leu Asn Val Ala Lys Val
  85 90 95
- Ala Gly Phe Ile Arg Ser Lys Ser Cys Glu Arg Val Gly Asp Glu Gln 100 105 110
- Gly Ser Asp Gly Glu Ser Gly Phe Gln Ser Ile Val Ile Ser Leu Lys 115 120 125
- Asp Ser Phe Tyr Asp Lys Ala Glu Ala Leu Val Gly Val Tyr Arg Asp 130 135 140
- Ser Glu Arg Ser Cys Ser Arg Thr Leu Thr Phe Asp Leu Arg Lys Tyr 145 150 155 160

Arg Glu Ser

- (2) INFORMATION FOR SEQ ID NO:420:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 122 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..122
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482232
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:
- Met Pro Pro Thr Lys Arg Phe Arg Asp Met Glu Gln Leu Ser Gly Gly 1 5 10 15
- Glu Lys Thr Val Ala Ala Leu Ala Leu Leu Phe Ala Ile His Ser Phe 20 25 30
- Arg Pro Ser Pro Phe Phe Ile Leu Asp Glu Val Asp Ala Ala Leu Asp 35 40 45
- Asn Leu Asn Val Ala Lys Val Ala Gly Phe Ile Arg Ser Lys Ser Cys 50 60
- Glu Arg Val Gly Asp Glu Gln Gly Ser Asp Gly Glu Ser Gly Phe Gln 65 70 75 80
- Ser Ile Val Ile Ser Leu Lys Asp Ser Phe Tyr Asp Lys Ala Glu Ala 85 90 95
- Leu Val Gly Val Tyr Arg Asp Ser Glu Arg Ser Cys Ser Arg Thr Leu

105 110 100 Thr Phe Asp Leu Arg Lys Tyr Arg Glu Ser

120 115

- (2) INFORMATION FOR SEQ ID NO:421:
  - (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 113 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..113
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482233
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

Met Glu Gln Leu Ser Gly Gly Glu Lys Thr Val Ala Ala Leu Ala Leu 10

Leu Phe Ala Ile His Ser Phe Arg Pro Ser Pro Phe Phe Ile Leu Asp 25

Glu Val Asp Ala Ala Leu Asp Asn Leu Asn Val Ala Lys Val Ala Gly

Phe Ile Arg Ser Lys Ser Cys Glu Arg Val Gly Asp Glu Gln Gly Ser

Asp Gly Glu Ser Gly Phe Gln Ser Ile Val Ile Ser Leu Lys Asp Ser 75 70

Phe Tyr Asp Lys Ala Glu Ala Leu Val Gly Val Tyr Arg Asp Ser Glu 90

Arg Ser Cys Ser Arg Thr Leu Thr Phe Asp Leu Arg Lys Tyr Arg Glu 110 105

Ser

- (2) INFORMATION FOR SEQ ID NO:422:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 773 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..773
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482234
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

ctccgccgcc aggacgacgg caaatvcgcc cagacagggt ggacgtcgac gccggcgaat 60 cctgctcgga ttgcacacat caccgccacc cgtcgtgcgc cgacatctgt aggtcgccag 120 ccaacaacct tagactgagg caccctgaat ccatctgcta ttgttcagct tggtgttcgg 180 240 qcaatccttg ttctcgcctc agcacaaata gatcgccaag atgaatagaa gttggttgaa tggtacattg ttttcccctg aatatatcaa tggtgtcaaa gaatttatga gctttattca 300 aagaaaattc ggtgaggatg aagatatttt gtgtccatgt agtagatgtc tcaaccaaaa 360 gtcctttcat caagcctttg tggagaagca tatattaatg aatgggatgg aaagtacata 420 480 tactcgatgg attcatcatg gagagaactt tgaggaagat gccggtcatt cgatacatgg gacaggtgtg attgatgatg acagctatgg tgatgattgt tttgatggga tgttacaaga 540 cctatgcact gcataagagc aagataaaga ggatggtgaa aatgaggatg gagacaatac 600 taatgatgac aatgagtcat tttatagtgt rgtgctgaaa gaggcgaaac gtcatattta 660 720 tcctqqttqt accaaatttt caaggttrtc ctttgtwgta aagcttcttc atatgaagtc attatatagg atcactaact ctgcatktac tgcarkatww aagttgttgg ttg

- (2) INFORMATION FOR SEQ ID NO:423:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 73 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..73
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482235
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

Pro Pro Pro Gly Arg Arg Gln Xaa Arg Pro Asp Arg Val Asp Val Asp 1 5 10 15

Ala Gly Glu Ser Cys Ser Asp Cys Thr His His Arg His Pro Ser Cys
20 25 30

Ala Asp Ile Cys Arg Ser Pro Ala Asn Asn Leu Arg Leu Arg His Pro
35 40 45

Glu Ser Ile Cys Tyr Cys Ser Ala Trp Cys Ser Gly Asn Pro Cys Ser 50 60

Arg Leu Ser Thr Asn Arg Ser Pro Arg

- (2) INFORMATION FOR SEQ ID NO:424:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 111 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..111
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482236
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

Asn Gly Val Lys Glu Phe Met Ser Phe Ile Gln Arg Lys Phe Gly Glu 20 25 30

Asp Glu Asp Ile Leu Cys Pro Cys Ser Arg Cys Leu Asn Gln Lys Ser 35 40 45

Phe His Gln Ala Phe Val Glu Lys His Ile Leu Met Asn Gly Met Glu 50 60

Ser Thr Tyr Thr Arg Trp Ile His His Gly Glu Asn Phe Glu Glu Asp 65 70 75 80

Ala Gly His Ser Ile His Gly Thr Gly Val Ile Asp Asp Asp Ser Tyr 85 90 95

Gly Asp Asp Cys Phe Asp Gly Met Leu Gln Asp Leu Cys Thr Ala 100 105 110

- (2) INFORMATION FOR SEQ ID NO:425:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 89 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..89
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482237
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

Met Ser Phe Ile Gln Arg Lys Phe Gly Glu Asp Glu Asp Ile Leu Cys
1 10 15

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Pro Cys Ser Arg Cys Leu Asn Gln Lys Ser Phe His Gln Ala Phe Val 20 25 30 Glu Lys His Ile Leu Met Asn Gly Met Glu Ser Thr Tyr Thr Arg Trp 35 40 45

Ile His His Gly Glu Asn Phe Glu Glu Asp Ala Gly His Ser Ile His 50 60

Gly Thr Gly Val Ile Asp Asp Ser Tyr Gly Asp Asp Cys Phe Asp 65 70 75 80

Gly Met Leu Gln Asp Leu Cys Thr Ala 85

- (2) INFORMATION FOR SEQ ID NO:426:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 501 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..501
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482238
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:426: cacggegece gteetetgte gttgaaggae agggagegge ggetagggtt tegeggtget

gtggcggccg acgcccgtcc tctactatcc gtggcgacca tcgtcggcta tccgcggast 120 gtggcgatcg gcctgtgctc ctatccgcgg ttgccgagga aagtactatg ttgttgatgc 180 tggatatcca aatagggatg agtacttggc cccgtacaaa ggacaactgt atcatgttcc ggaatggaga aatgatcctc cacctaatgg ctcactcgaa ggtgaagcat gggaagtgar 300 tcacaggtcc aacgacctcc atgaaggtaa agcactggc ttcaagtkag tcgcaagtcc aatgaggta agcatggag gtccaagtra atctggaaag aataacggtg 420 gaagtaggtt gggccttata ataggggagg agtagtagaa attatttcc gcgtagtctg 480 ggttttaatt atttagataa g

- (2) INFORMATION FOR SEQ ID NO:427:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 58 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..58
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482239
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

His Gly Ala Arg Pro Leu Ser Leu Lys Asp Arg Glu Arg Arg Leu Gly
1 10 15

Phe Arg Gly Ala Val Ala Ala Asp Ala Arg Pro Leu Leu Ser Val Ala 20 25 30

Thr Ile Val Gly Tyr Pro Arg Xaa Val Ala Ile Gly Leu Cys Ser Tyr 35 40 45

Pro Arg Leu Pro Arg Lys Val Leu Cys Cys 50 55

- (2) INFORMATION FOR SEQ ID NO:428:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 98 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

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- (A) NAME/KEY: peptide
- (B) LOCATION: 1..98
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482240
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:
- Arg Arg Pro Ser Ser Val Val Glu Gly Gln Gly Ala Ala Ala Arg Val 1 5 10 15
- Ser Arg Cys Cys Gly Gly Arg Arg Pro Ser Ser Thr Ile Arg Gly Asp
  20 25 30
- His Arg Arg Leu Ser Ala Xaa Cys Gly Asp Arg Pro Val Leu Leu Ser
- Ala Val Ala Glu Glu Ser Thr Met Leu Leu Met Leu Asp Ile Gln Ile
  50 60
- Gly Met Ser Thr Trp Pro Arg Thr Lys Asp Asn Cys Ile Met Phe Arg
  70 75 80
- Asn Gly Glu Met Ile Leu His Leu Met Ala His Ser Lys Val Lys His 85 90 95
- Gly Lys
- (2) INFORMATION FOR SEQ ID NO:429:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 798 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..798
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482245
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:429: aaccatagaa atcctccaat tattcgattc ccaagccact aaggcccttg gaggaacaac

agaatccaga aaccgaaaag argcctcact gctgccgcct gggccaagtc gtcgtcttgc 120 tttgccaatc cgtcgctcca cctgaacaca ccggcgaaga ggaggcgaag aagcgatggg 180 cgtgaccaag gaggacgtcg aggcggccat cacctctgct ctcagccctt ccaatctcgt 240 300 ggtgacggac acgtccggag ggtgtggcgc gagctacgag atcgaggtgg tgtcggagaa gttcgagggg aagcggctgc tggagaggca ccggatggtg aacaccgcgc tggcgtctca 360 catggcggag atccacgccg tctccatcaa gaaggcgctc accccggctc aggcccagcc 420 ccagggccca gccggagccg gccgccgata agccccaggc ttaagtgctt aacacccccc 480 aaaacggttt gatcccatat gccgatgcac gattacattg gctatctgct tgaataatgc 540 gggcggatgc acttgctaaa ttgcaggatg ttatccttga ctgattagaa acttctgcac 600 cgtgcattta acttctgtgt cactgtgtgt gtgttctgga tgcttctgcc ctggtcgttt 660 720 gctcgagact gtgtgttgca gttcatgctg ttaatgttct gccagggtgg ggttttcagt cctggaattt ttatatttga ctgttgctat gtctttcctt gcttgtaggg gtaaggggtt 780

- (2) INFORMATION FOR SEQ ID NO:430:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 47 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

tattctttaa ccttgtgg

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482246
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:
- Thr Ile Glu Ile Leu Gln Leu Phe Asp Ser Gln Ala Thr Lys Ala Leu

  1 5 10 15

  Gly Gly Thr Thr Glu Ser Arg Asn Arg Lys Xaa Ala Ser Leu Leu Pro

20 25 30
Pro Gly Pro Ser Arg Arg Leu Ala Leu Pro Ile Arg Arg Ser Thr
35 40 45

- (2) INFORMATION FOR SEQ ID NO:431:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 91 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..91
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482247
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

Met Gly Val Thr Lys Glu Asp Val Glu Ala Ala Ile Thr Ser Ala Leu
1 5 10 15

Ser Pro Ser Asn Leu Val Val Thr Asp Thr Ser Gly Gly Cys Gly Ala
20 25 30

Ser Tyr Glu Ile Glu Val Val Ser Glu Lys Phe Glu Gly Lys Arg Leu
35 40 45

Leu Glu Arg His Arg Met Val Asn Thr Ala Leu Ala Ser His Met Ala
50 55 60

Glu Ile His Ala Val Ser Ile Lys Lys Ala Leu Thr Pro Ala Gln Ala 65 70 75 80

Gln Pro Gln Gly Pro Ala Gly Ala Gly Arg Arg 85 90

- (2) INFORMATION FOR SEQ ID NO:432:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 572 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..572
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482248
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

atgggtggtc cgcactccgc accggtaccg cacaaccccc acacccgcag catccccatt 60 tctccgtccc aaaaccctag gctagtcccc ccacacctgg atccatcggg tcggaggcca 120 tgacgacggc gaggctccga tcctcggcct ccctccgcgg ggctctcctc cgccacttct 180 ccgtgggtcc cgcctcgact ccgcgcgccg tctcccgggt cccagatttc caggttcctc 240 agtctattat gtggaggcat ttcgcaacgt ccaggcctaa ttctcttgca agacgcgaca 300 actttggtct gatggcctgt ttgcacgctc agatacgatg cgcttcgcag gctgctgctg 360 420 tgaaagaaac cgaatccagt agcagcaaga taagcatcgg gcccaaacca aaacagatca aggaggatga cgaggatgct aacctggtat accaagggcc aatatcatcg accataaaga 480 aagtgaagct tototootg tocacotgot goototoogt gtogotgggg coagtggtaa 540 cattcatgac ttcgcctgac atgaatgtga tc

- (2) INFORMATION FOR SEQ ID NO:433:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 151 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..151

(D) OTHER INFORMATION: / Ceres Seq. ID 1482249 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:433: Met Thr Thr Ala Arg Leu Arg Ser Ser Ala Ser Leu Arg Gly Ala Leu 10 Leu Arg His Phe Ser Val Gly Pro Ala Ser Thr Pro Arg Ala Val Ser 25 2.0 Arg Val Pro Asp Phe Gln Val Pro Gln Ser Ile Met Trp Arg His Phe 40 Ala Thr Ser Arg Pro Asn Ser Leu Ala Arg Arg Asp Asn Phe Gly Leu 55 Met Ala Cys Leu His Ala Gln Ile Arg Cys Ala Ser Gln Ala Ala Ala 75 70 Val Lys Glu Thr Glu Ser Ser Ser Lys Ile Ser Ile Gly Pro Lys 90 Pro Lys Gln Ile Lys Glu Asp Asp Glu Asp Ala Asn Leu Val Tyr Gln 105 Gly Pro Ile Ser Ser Thr Ile Lys Lys Val Lys Leu Leu Ser Leu Ser 120 125 Thr Cys Cys Leu Ser Val Ser Leu Gly Pro Val Val Thr Phe Met Thr 135 140 Ser Pro Asp Met Asn Val Ile 150 (2) INFORMATION FOR SEQ ID NO:434: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 108 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..108 (D) OTHER INFORMATION: / Ceres Seq. ID 1482250 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:434: Met Trp Arg His Phe Ala Thr Ser Arg Pro Asn Ser Leu Ala Arg Arg 10 Asp Asn Phe Gly Leu Met Ala Cys Leu His Ala Gln Ile Arg Cys Ala 25 Ser Gln Ala Ala Ala Val Lys Glu Thr Glu Ser Ser Ser Lys Ile 40 Ser Ile Gly Pro Lys Pro Lys Gln Ile Lys Glu Asp Asp Glu Asp Ala 55 Asn Leu Val Tyr Gln Gly Pro Ile Ser Ser Thr Ile Lys Lys Val Lys 75 Leu Leu Ser Leu Ser Thr Cys Cys Leu Ser Val Ser Leu Gly Pro Val 85 90 Val Thr Phe Met Thr Ser Pro Asp Met Asn Val Ile 100 105 (2) INFORMATION FOR SEQ ID NO:435: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 87 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..87
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482251

 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

 Met Ala Cys Leu His Ala Gln Ile Arg Cys Ala Ser Gln Ala Ala Ala 1

 1
 5
 10
 15

 Val Lys Glu Thr Glu Ser Ser Ser Ser Lys Ile Ser Ile Gly Pro Lys 20
 25
 30

 Pro Lys Gln Ile Lys Glu Asp Asp Glu Asp Ala Asn Leu Val Tyr Gln 35
 40
 45

 Gly Pro Ile Ser Ser Thr Ile Lys Lys Val Lys Leu Leu Ser Leu Ser 50
 55
 60

 Thr Cys Cys Leu Ser Val Ser Leu Gly Pro Val Val Thr Phe Met Thr 65
 70
 75
 80

Ser Pro Asp Met Asn Val Ile 85

- (2) INFORMATION FOR SEQ ID NO:436:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 519 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..519
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482254
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:436: aaggeteact geteagtget caetgeteac tagetaaaaa cateteettt ettateeatg 60 qaqanqqcaq cqctcacctc ccactccctg cagcgcccag cagcagcagc agctgctccc 120 gcgcatggcc agcngcggag ggtcggagcg gcgggcctgc ggcaccggca gccgcgcgc 180 ggcggcagga tccgggccct gccttcggcg gaggtcatca gcgagatcct gagccccaag 240 ctggtgcccg gctcgcccgc cgacaccggc gacgtctcct cgctcgtccc ggtcagtgcc 300 ctgatgctgc tcttctactt cgtgtccaac tgggtggtgc ccgagctgct cctgaagggc 360 ctcaacgage ccaageeega ggacgaageg tecaegteet tegeegegte egegnacaae 420 gccgccgccg ctggcccagc agacgacggc ggcaccggta agatccgcct caaggtcaag 480 aaqaaqaaqa acqqqaaaqc gaccatcgtc aaggtctag
- (2) INFORMATION FOR SEQ ID NO:437:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 152 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..152
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482255
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:
- Gly Ser Leu Leu Ser Ala His Cys Ser Leu Ala Lys Asn Ile Ser Phe 1 5 10 15
- Leu Ile His Gly Xaa Gly Ser Ala His Leu Pro Leu Pro Ala Ala Pro 20 25 30
- Ser Ser Ser Ser Cys Ser Arg Ala Trp Pro Xaa Ala Glu Gly Arg 35 40 45
- Ser Gly Gly Pro Ala Ala Pro Ala Ala Ala Arg Arg Gln Asp Pro 50 60
- Gly Pro Ala Phe Gly Gly His Gln Arg Asp Pro Glu Pro Gln Ala 65 70 75 80
- Gly Ala Arg Leu Ala Arg Arg His Arg Arg Arg Leu Leu Ala Arg Pro 85 90 95
- Gly Gln Cys Pro Asp Ala Ala Leu Leu Arg Val Gln Leu Gly Gly

105 100 Ala Arg Ala Ala Pro Glu Gly Pro Gln Arg Ala Gln Ala Arg Gly Arg 120 Ser Val His Val Leu Arg Arg Val Arg Xaa Gln Arg Arg Arg Trp 135 Pro Ser Arg Arg Arg His Arg 145 150 (2) INFORMATION FOR SEQ ID NO:438: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 153 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..153 (D) OTHER INFORMATION: / Ceres Seq. ID 1482256 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:438: Met Glu Xaa Ala Ala Leu Thr Ser His Ser Leu Gln Arg Pro Ala Ala 10 Ala Ala Ala Pro Ala His Gly Gln Xaa Arg Arg Val Gly Ala Ala Gly Leu Arg His Arg Gln Pro Arg Ala Gly Gly Arg Ile Arg Ala Leu Pro Ser Ala Glu Val Ile Ser Glu Ile Leu Ser Pro Lys Leu Val Pro Gly Ser Pro Ala Asp Thr Gly Asp Val Ser Ser Leu Val Pro Val Ser 70 Ala Leu Met Leu Leu Phe Tyr Phe Val Ser Asn Trp Val Val Pro Glu 90 Leu Leu Lys Gly Leu Asn Glu Pro Lys Pro Glu Asp Glu Ala Ser 105 Thr Ser Phe Ala Ala Ser Ala Xaa Asn Ala Ala Ala Gly Pro Ala 120 Asp Asp Gly Gly Thr Gly Lys Ile Arg Leu Lys Val Lys Lýs Lys 135 140 Asn Gly Lys Ala Thr Ile Val Lys Val 150 (2) INFORMATION FOR SEQ ID NO:439: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 278 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..278

- (D) OTHER INFORMATION: / Ceres Seq. ID 1482257
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

artgcaagca tatrgngcgc cgtgccagcc tgctcctcgc cgcrgcgctg ctcgtcgccg 60 tcgctgccgc ggcggtgccs cgacgtgcga gcgcatcgag tgcccggcgt acgaggtggt 120 ggacagcgcc aacgggttcg agatccggc gtacacggac gccatgtgga tcaccacggc 180 gcccatcgag gacatctcct tcgtcgccgc cacgcgcacc ggcttcctac agctgttcga 240 ctacatcbag ggcaagaacg cgtacaacca gacgatcg

- (2) INFORMATION FOR SEQ ID NO:440:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids

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- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..92
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482258
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

Xaa Ala Ser Ile Xaa Xaa Ala Val Pro Ala Cys Ser Ser Pro Xaa Arg 1 5 10 15

Cys Ser Ser Pro Ser Leu Pro Arg Arg Cys Xaa Asp Val Arg Ala His
20 25 30

Arg Val Pro Gly Val Arg Gly Gly Gln Arg Gln Arg Val Arg Asp
35 40 45

Pro Ala Val His Gly Arg His Val Asp His His Gly Ala His Arg Gly 50 55 60

His Leu Leu Arg Arg Arg His Ala His Arg Leu Pro Thr Ala Val Arg 65 70 75 80

Leu His Xaa Gly Gln Glu Arg Val Gln Pro Asp Asp 85 90

- (2) INFORMATION FOR SEQ ID NO:441:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..92
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482259
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

Xaa Gln Ala Tyr Xaa Ala Pro Cys Gln Pro Ala Pro Arg Xaa Ala 1 5 10 15

Ala Arg Arg Arg Cys Arg Gly Gly Ala Xaa Thr Cys Glu Arg Ile
20 25 30

Glu Cys Pro Ala Tyr Glu Val Val Asp Ser Ala Asn Gly Phe Glu Ile 35 40 45

Arg Arg Tyr Thr Asp Ala Met Trp Ile Thr Thr Ala Pro Ile Glu Asp 50 55 60

Ile Ser Phe Val Ala Ala Thr Arg Thr Gly Phe Leu Gln Leu Phe Asp 65 70 75 80

Tyr Ile Xaa Gly Lys Asn Ala Tyr Asn Gln Thr Ile 85 90

- (2) INFORMATION FOR SEQ ID NO:442:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..92
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482260
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:
- Cys Lys His Xaa Xaa Arg Arg Ala Ser Leu Leu Ala Xaa Ala Leu 1 5 10 15

Leu Val Ala Val Ala Ala Ala Ala Val Xaa Arg Arg Ala Ser Ala Ser 20 25 30

Ser Ala Arg Arg Thr Arg Trp Trp Thr Ala Pro Thr Gly Ser Arg Ser

35 40 45
Gly Gly Thr Arg Thr Pro Cys Gly Ser Pro Arg Arg Pro Ser Arg Thr

50 55 60 Ser Pro Ser Ser Pro Pro Arg Ala Pro Ala Ser Tyr Ser Cys Ser Thr

Ser Pro Ser Ser Pro Pro Arg Ala Pro Ala Ser Tyr Ser Cys Ser Thr 65 70 75 80

Thr Xaa Arg Ala Arg Thr Arg Thr Thr Arg Arg Ser 85 90

- (2) INFORMATION FOR SEQ ID NO:443:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 931 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..931
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482261
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:443: gaatteeteg cegeegtett egteeaceag aaceatggee teegacaceg ceteggeagt 60 120 tccgtcgtct gtggtctcag ctgccgagga gacgctcgga tataccgaat ccgtagggac 180 catetetece atetgetege ggeggeggeg geggaceceg acgeegtgge egageteeca 240 ccccttctcc gggcgcgcgc tttccttgcc ttggcgcagg ccgcgacctc ccttctcgga 300 qttcqtttaa qqtqttcqqq aqttqaccct gacgagcacc ccatcagaaa ggagtttgaa 360 aggttaagcc taatgcagga gaagttaaat caatttgaga actgggacaa agcaccactt cqcccttcta ctacactaaa tacacaagca gcagcaaggt tcattggaca ctcactttcc 420 catctgacat ctgatcagaa gaggagcatg catgaaataa gtagaggaga aaggcggagt 480 540 tqqtctqqqc aqaaqaqaaa qcctgaacct tcagtagaaa agaagtctgt tcgtgctgct 600 qcaqaaqagt tccttgcaaa ggcttctcag gaacttattg gacatagtga tagcagggtc 660 aaqqqtcctq ttatactcat ttctgatgaa gatgaggact agatcaaaaa aatgggcgct 720 taccagatta catgcctgat tcatcggcta ggcaaaggaa ggtagaagtt cctggtgatg 780 aagataaact tacgtacatt gctgtggtga tgaagatgaa tttatctgca ttgctgtgtt 840 qttctacatq taacaqqqaa tqqaqcaaaq ctqcataqqc ttqcttaaqt ccccaqttct gggagcaatt ggcctcgaat cttgagtgca atttatctga gtttctttcc ggaaagaatt 900 ttqacattct atttqctagt ggaactggag c
- (2) INFORMATION FOR SEQ ID NO:444:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 213 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..213
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482262
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:
- Glu Phe Leu Ala Ala Val Phe Val His Gln Asn His Gly Leu Arg His
  1 5 10 15
- Arg Leu Gly Ser Ser Val Val Cys Gly Leu Ser Cys Arg Gly Asp Ala 20 25 30
- Arg Ile Tyr Arg Ile Arg Arg Asp His Leu Ser His Leu Leu Ala Ala 35 40 45
- Ala Ala Ala Asp Pro Asp Ala Val Ala Glu Leu Pro Pro Leu Leu Arg 50 55 60
- Ala Arg Ala Phe Leu Ala Leu Ala Gln Ala Ala Thr Ser Leu Leu Gly

Asp Gln Lys Arg Ser Met His Glu Ile Ser Arg Gly Glu Arg Arg Ser 145 150 155 160

Trp Ser Gly Gln Lys Arg Lys Pro Glu Pro Ser Val Glu Lys Lys Ser 165 170 175

Val Arg Ala Ala Ala Glu Glu Phe Leu Ala Lys Ala Ser Gln Glu Leu
180 185 190

Ile Gly His Ser Asp Ser Arg Val Lys Gly Pro Val Ile Leu Ile Ser 195 200 205

Asp Glu Asp Glu Asp 210

- (2) INFORMATION FOR SEQ ID NO:445:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 109 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..109
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482263

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

Met Gln Glu Lys Leu Asn Gln Phe Glu Asn Trp Asp Lys Ala Pro Leu

1 10 15

Arg Pro Ser Thr Thr Leu Asn Thr Gln Ala Ala Ala Arg Phe Ile Gly
20
25
30

His Ser Leu Ser His Leu Thr Ser Asp Gln Lys Arg Ser Met His Glu 35 40 45

Ile Ser Arg Gly Glu Arg Arg Ser Trp Ser Gly Gln Lys Arg Lys Pro 50 55 60

Glu Pro Ser Val Glu Lys Lys Ser Val Arg Ala Ala Ala Glu Glu Phe 65 70 75 80

Leu Ala Lys Ala Ser Gln Glu Leu Ile Gly His Ser Asp Ser Arg Val 85 90 95

Lys Gly Pro Val Ile Leu Ile Ser Asp Glu Asp Glu Asp 100 105

- (2) INFORMATION FOR SEQ ID NO:446:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 600 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..600
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482264
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

actgacaget egeogarrrg eegegeegeg etegaracee gtegatggeg aggeggaget ggeggtegae geaacegeag gegeegeate eegggttegg ttegegeeea eetecaataa

| cctactcatc | tcctcatggg | attcggggct | gcggttgtac | gatgccgacg | agggcacgct | 180 |
|------------|------------|------------|------------|------------|------------|-----|
| cagggtcaac | gtggagtcag | aggcggcatt | cctcgactgc | tgcttcgagg | atgagtctgc | 240 |
| agcgtttgcc | tgcggctctg | atggatctgt | gagaaggtac | gacttccact | caggttcgca | 300 |
| ggatacggtg | gggctccatg | aagatgcact | agcctgcatt | gagttctctt | cactgaccgg | 360 |
| tcagattatg | acaggcagcc | ttgacaagaa | gctaaagctt | tgggattcaa | aaacaagaaa | 420 |
| tgtaagcccg | agcggcacca | taaccttaaa | ttcagatgtg | gcctcaattt | ctatatgcgg | 480 |
| catttacata | ttagctgcag | ttgagagaaa | tgtttatctt | tatgacatga | ggaatctaac | 540 |
| aagaccagtt | gatgaaaaaa | gactgtcctc | tggattatca | aattcgatgc | cttcatactt | 600 |

- (2) INFORMATION FOR SEQ ID NO:447:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 199 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..199
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482265
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:
- Leu Thr Ala Arg Arg Xaa Ala Ala Pro Arg Ser Xaa Pro Val Asp Gly
  1 10 15
- Glu Ala Glu Leu Ala Val Asp Ala Thr Ala Gly Ala Ala Ser Arg Val 20 25 30
- Arg Phe Ala Pro Thr Ser Asn Asn Leu Leu Val Ser Ser Trp Asp Ser 35 40 45
- Gly Leu Arg Leu Tyr Asp Ala Asp Glu Gly Thr Leu Arg Val Asn Val
  50 55 60
- Glu Ser Glu Ala Ala Phe Leu Asp Cys Cys Phe Glu Asp Glu Ser Ala 65 70 75 80
- Ala Phe Ala Cys Gly Ser Asp Gly Ser Val Arg Arg Tyr Asp Phe His 85 90 95
- Ser Gly Ser Gln Asp Thr Val Gly Leu His Glu Asp Ala Leu Ala Cys
  100 105 110
- Ile Glu Phe Ser Ser Leu Thr Gly Gln Ile Met Thr Gly Ser Leu Asp 115 120 125
- Lys Lys Leu Lys Leu Trp Asp Ser Lys Thr Arg Asn Val Ser Pro Ser 130 135 140
- Gly Thr Ile Thr Leu Asn Ser Asp Val Ala Ser Ile Ser Ile Cys Gly
  145 150 155 160
- Ile Tyr Ile Leu Ala Ala Val Glu Arg Asn Val Tyr Leu Tyr Asp Met 165 170 175
- Arg Asn Leu Thr Arg Pro Val Asp Glu Lys Arg Leu Ser Ser Gly Leu 180 185 190

Ser Asn Ser Met Pro Ser Tyr

- (2) INFORMATION FOR SEQ ID NO:448:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 516 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..516
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482270
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

gegteaceat ceatttgacg aggeggttta tececeagea ecceaaceaa cetttecaeg 60 120 taccaccggg tttctgtccg cgccccgccc ttcaaaagca ggtccgcacg ccggccggcg agacagacga caccaccacg ccgggacggg aggcacaggt gcggtctgcg tcgagagttg 180 240 gtccactggc aggccggaat gaagaagtgc gcgtcggagc tggagctgga ggcgttcatc cgggagagcg gcgaggacgc ccgcgccgcc gccggaggta gcagtccggg gtgcggtgga 300 tcaagcgatc ccggagggag cggcgtcttc tcacccggct tcggtttcgc cgactcggac 360 accatggatg gaggcagttg gtggtacggg aacgtccgca cgccgaaccc agtcatgtcg 420 caggoggogt coatatoogo tagocooggg ctaaccacot cagocaatca tgotottgaa 480

- agcgagtcag actccgacag cgaatcactg tatgag (2) INFORMATION FOR SEQ ID NO:449:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 66 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..66
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482271

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

Arg His His Pro Phe Asp Glu Ala Val Tyr Pro Pro Ala Pro Gln Pro 1 5 10 15

Thr Phe Pro Arg Thr Thr Gly Phe Leu Ser Ala Pro Arg Pro Ser Lys 20 25 30

Ala Gly Pro His Ala Gly Arg Arg Asp Arg Arg His His His Ala Gly 35 40 45

Thr Gly Gly Thr Gly Ala Val Cys Val Glu Ser Trp Ser Thr Gly Arg. 50 55 60

Pro Glu

65

- (2) INFORMATION FOR SEQ ID NO:450:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 92 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..92
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482272
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

Val Thr Ile His Leu Thr Arg Arg Phe Ile Pro Gln His Pro Asn Gln

Pro Phe His Val Pro Pro Gly Phe Cys Pro Arg Pro Ala Leu Gln Lys

Gln Val Arg Thr Pro Ala Gly Glu Thr Asp Asp Thr Thr Thr Pro Gly 35 40 45

Arg Glu Ala Gln Val Arg Ser Ala Ser Arg Val Gly Pro Leu Ala Gly
50 55 60

Arg Asn Glu Glu Val Arg Val Gly Ala Gly Ala Gly Gly Val His Pro 65 70 75 80

- Gly Glu Arg Arg Gly Arg Pro Arg Arg Arg Arg Arg 85 90
- (2) INFORMATION FOR SEQ ID NO:451:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 106 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..106
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482273
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

Met Lys Lys Cys Ala Ser Glu Leu Glu Leu Glu Ala Phe Ile Arg Glu 1 10 15

Ser Gly Glu Asp Ala Arg Ala Ala Ala Gly Gly Ser Ser Pro Gly Cys 20 25 30

Gly Gly Ser Ser Asp Pro Gly Gly Ser Gly Val Phe Ser Pro Gly Phe
35 40 45

Gly Phe Ala Asp Ser Asp Thr Met Asp Gly Gly Ser Trp Trp Tyr Gly 50 60

Asn Val Arg Thr Pro Asn Pro Val Met Ser Gln Ala Ala Ser Ile Ser 65 70 75 80

Ala Ser Pro Gly Leu Thr Thr Ser Ala Asn His Ala Leu Glu Ser Glu
85 90 95

Ser Asp Ser Asp Ser Glu Ser Leu Tyr Glu 100 105

- (2) INFORMATION FOR SEQ ID NO:452:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 561 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..561
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482274
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

aagatggaca ggctctgtcg ccactgctac accagtacac cctgcacgcg ctgcgggcgt 60 ttccgccggc tttgtgcctc ctctgccctc cccgggcgct cgccctccgt ccacgctcaa 120 gctcgctccg tcccggcgcc tcgaactcgt cgtcctcgct tccgctgtcg ccaccgcgaa 180 gcatgaggag gcgtcctggg atcactggct tgcagaatgt ggcggctact ctcgaactat 240 300 cagaaccagt tgggactggt cggggacaat atggccaagg tcgggaccga tgtcatgaag aagcagcgac ttgggatggt ccgatcacag ctcgagaaat ttgcttgcaa gcataaggtt 360 ttgagcaggt ttggtgcaat ctgattttga acctgctatg gacatcttcc actcaagttc 420 480 ttgtcaatgg agtgcctgga cagcctataa atctcaagcg tgggttgcaa caagctgctc tgaaacatcc attttctctg kgccatcaat ggatgcttag cacagatcgc ttccacatat 540 cacatgatca atcagtactg g

- (2) INFORMATION FOR SEQ ID NO:453:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 61 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..61
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482275
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

Lys Met Asp Arg Leu Cys Arg His Cys Tyr Thr Ser Thr Pro Cys Thr 1 5 10 15

Arg Cys Gly Arg Phe Arg Arg Leu Cys Ala Ser Ser Ala Leu Pro Gly

20 25 30
Arg Ser Pro Ser Val His Ala Gln Ala Arg Ser Val Pro Ala Pro Arg
35 40 45
Thr Arg Arg Pro Arg Phe Arg Cys Arg His Arg Glu Ala

Thr Arg Arg Pro Arg Phe Arg Cys Arg His Arg Giu Ala 50 55 60

- (2) INFORMATION FOR SEQ ID NO:454:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 98 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..98
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482276

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

Arg Trp Thr Gly Ser Val Ala Thr Ala Thr Pro Val His Pro Ala Arg

1 10 15

Ala Ala Gly Val Ser Ala Gly Phe Val Pro Pro Leu Pro Ser Pro Gly
20 25 30

Ala Arg Pro Pro Ser Thr Leu Lys Leu Ala Pro Ser Arg Arg Leu Glu 35 40 45

Leu Val Val Leu Ala Ser Ala Val Ala Thr Ala Lys His Glu Glu Ala 50 55 60

Ser Trp Asp His Trp Leu Ala Glu Cys Gly Gly Tyr Ser Arg Thr Ile
65 70 75 80

Arg Thr Ser Trp Asp Trp Ser Gly Thr Ile Trp Pro Arg Ser Gly Pro 85 90 95

Met Ser

- (2) INFORMATION FOR SEQ ID NO:455:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 117 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..117
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482277
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

Asp Gly Gln Ala Leu Ser Pro Leu Leu His Gln Tyr Thr Leu His Ala

Leu Arg Ala Phe Pro Pro Ala Leu Cys Leu Leu Cys Pro Pro Arg Ala
20 25 30

Leu Ala Leu Arg Pro Arg Ser Ser Ser Leu Arg Pro Gly Ala Ser Asn
35 40 45

Ser Ser Ser Leu Pro Leu Ser Pro Pro Arg Ser Met Arg Arg

Pro Gly Ile Thr Gly Leu Gln Asn Val Ala Ala Thr Leu Glu Leu Ser 70 75 80

Glu Pro Val Gly Thr Gly Arg Gly Gln Tyr Gly Gln Gly Arg Asp Arg
85 90 95

Cys His Glu Glu Ala Ala Thr Trp Asp Gly Pro Ile Thr Ala Arg Glu 100 105 110

Ile Cys Leu Gln Ala

- (2) INFORMATION FOR SEQ ID NO:456:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 578 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..578
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482282
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:456: 60 acctcggctc gggcgcagag cgcgcggcgc cggcgcgtcc tctcctcctg ctccgatctc tctgcccagc cccgcctgtg cgcttcgcta ctacgcttcc tccatgcatc ccctcagcca 120 tgtacgcctg tatttgggaa gacattagcg gagttgaatc cagaagaaga gccgaagagt 180 tatcttagcc acagccaggt cgcccgttag ttgttcgcgg aaatgtccct ccgccagctg 240 cttcaccaaa cgcgtccgtg gcgcgcgctt gagcagccca cgaagatgtc ttgtctcctc 300 360 tocatottoc gtgcgctctc cattctccgt tctgaaggct cggctgagcc actgcgccga 420 tcttcatctg tgccagcccc gctgccaaga agcttgcctt gctccagctc tgaccccctt 480 ggccccagat tcagcatcga cgtggtcgac tcggaccatt ggccctcgtc atttgacttg ktgtccgacg ctgcacggag caatgaatgc ccagatgtct ncgagcaaca tgaggatgat 540 gaactgcmcg actcttatga tgagatagat gacatgag
- (2) INFORMATION FOR SEQ ID NO:457:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 69 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..69
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482283
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

Thr Ser Ala Arg Ala Gln Ser Ala Arg Arg Arg Arg Val Leu Ser Ser 1 10 15

Cys Ser Asp Leu Ser Ala Gln Pro Arg Leu Cys Ala Ser Leu Leu Arg 20 25 30

Phe Leu His Ala Ser Pro Gln Pro Cys Thr Pro Val Phe Gly Lys Thr

Leu Ala Glu Leu Asn Pro Glu Glu Glu Pro Lys Ser Tyr Leu Ser His 50 55 60

Ser Gln Val Ala Arg

65

- (2) INFORMATION FOR SEQ ID NO:458:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 118 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..118
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482284
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:
- Met Ser Leu Arg Gln Leu Leu His Gln Thr Arg Pro Trp Arg Ala Leu 1 5 10 15 Glu Gln Pro Thr Lys Met Ser Cys Leu Leu Ser Ile Phe Arg Ala Leu

25 Ser Ile Leu Arg Ser Glu Gly Ser Ala Glu Pro Leu Arg Arg Ser Ser 40 Ser Val Pro Ala Pro Leu Pro Arg Ser Leu Pro Cys Ser Ser Ser Asp Pro Leu Gly Pro Arg Phe Ser Ile Asp Val Val Asp Ser Asp His Trp 75 Pro Ser Ser Phe Asp Leu Xaa Ser Asp Ala Ala Arg Ser Asn Glu Cys 90 85 Pro Asp Val Xaa Glu Gln His Glu Asp Asp Glu Leu Xaa Asp Ser Tyr 105 100 Asp Glu Ile Asp Asp Met 115

- (2) INFORMATION FOR SEQ ID NO:459:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 97 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..97
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482285
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:
- Met Ser Cys Leu Leu Ser Ile Phe Arg Ala Leu Ser Ile Leu Arg Ser 10 5 Glu Gly Ser Ala Glu Pro Leu Arg Arg Ser Ser Ser Val Pro Ala Pro
- 25
- Leu Pro Arg Ser Leu Pro Cys Ser Ser Ser Asp Pro Leu Gly Pro Arg 40
- Phe Ser Ile Asp Val Val Asp Ser Asp His Trp Pro Ser Ser Phe Asp 55
- Leu Xaa Ser Asp Ala Ala Arg Ser Asn Glu Cys Pro Asp Val Xaa Glu 7.0
- Gln His Glu Asp Asp Glu Leu Xaa Asp Ser Tyr Asp Glu Ile Asp Asp 90 85

Met

- (2) INFORMATION FOR SEQ ID NO:460:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 881 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..881
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482289
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:460: tetetette tteeccagea atgeaattee geagacagae geaggeggea rgeggeagge 60 ggcggcgcac cgcaccgctt cttcctcttc tatctctcat ctacagcctt cgctgcgccg 120 ccatggccac caccegettg etgeogetge teegacgeeg cetegeegee geaategeeg 180 gategeetge tecetaetee etecgaggae ecteatitee tgeaceagea getgeaggge 240 taaggtccct cctaacagtt gctggagcga gcgatactgc aacagaaccc caggaccaac 300 agcatteega aacaacteec eegeeggett etgteeegae aeeggagtee ggteteaaag 360 tcagggacac ctccaacctg aagatctcac caaggcatga cctcgccatg atctttacgt 420 gcaaggtgtg cgagaccagg tccatgaaga tggccagcag ggactcgtac gagaacggag 480

tcgtggtcgt gcggtgcggt ggctgcaaca acctccacct catggcggac aggcttggct 540 ggtttggga gccagggac atcgaggact tcctagcgac gcaaggggag gaggtgaaga 600 aaggttcgac agatactatc agctttactt tggacgactt ggctgggtct caggtcagtt ctaaggggcc ttccgaacaa aattaatatg atagtgtttg gtccagtaag aacctgtaga 720 agcctctctt tactataaag aagatgcgcg tgtcacctgt gtgttgaaga aaaaaacgcc 780 tctagaagcc taccttaact gttgcacctg tagttctgct taacttcatg gctttcatg 840 tgtagcttcc gagcccatca aatatgcgat gttgttattc t

- (2) INFORMATION FOR SEQ ID NO:461:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 227 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..227
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482290
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

Ser Leu Ser Ser Pro Ala Met Gln Phe Arg Arg Gln Thr Gln Ala Ala 1 5 10 15

Xaa Gly Arg Arg Arg Thr Ala Pro Leu Leu Pro Leu Leu Ser Leu 20 25 30

Ile Tyr Ser Leu Arg Cys Ala Ala Met Ala Thr Thr Arg Leu Leu Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Leu Leu Arg Arg Arg Leu Ala Ala Ile Ala Gly Ser Pro Ala Pro 50 55 60

Tyr Ser Leu Arg Gly Pro Ser Phe Pro Ala Pro Ala Ala Ala Gly Leu 65 70 75 80

Arg Ser Leu Leu Thr Val Ala Gly Ala Ser Asp Thr Ala Thr Glu Pro
85 90 95

Gln Asp Gln Gln His Ser Glu Thr Thr Pro Pro Pro Ala Ser Val Pro
100 105 110

Thr Pro Glu Ser Gly Leu Lys Val Arg Asp Thr Ser Asn Leu Lys Ile
115 120 125

Ser Pro Arg His Asp Leu Ala Met Ile Phe Thr Cys Lys Val Cys Glu 130 135 140

Thr Arg Ser Met Lys Met Ala Ser Arg Asp Ser Tyr Glu Asn Gly Val 145 150 155 160

Val Val Val Arg Cys Gly Gly Cys Asn Asn Leu His Leu Met Ala Asp 165 170 175

Arg Leu Gly Trp Phe Gly Glu Pro Gly Ser Ile Glu Asp Phe Leu Ala 180 185 190

Thr Gln Gly Glu Glu Val Lys Lys Gly Ser Thr Asp Thr Ile Ser Phe 195 200 205

Thr Leu Asp Asp Leu Ala Gly Ser Gln Val Ser Ser Lys Gly Pro Ser 210 215 220

Glu Gln Asn

225

- (2) INFORMATION FOR SEQ ID NO:462:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 221 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..221

(D) OTHER INFORMATION: / Ceres Seq. ID 1482291 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:462: Met Gln Phe Arg Arg Gln Thr Gln Ala Ala Xaa Gly Arg Arg Arg 10 Thr Ala Pro Leu Leu Pro Leu Leu Ser Leu Ile Tyr Ser Leu Arg Cys 25 Ala Ala Met Ala Thr Thr Arg Leu Leu Pro Leu Leu Arg Arg Arg Leu 40 Ala Ala Ile Ala Gly Ser Pro Ala Pro Tyr Ser Leu Arg Gly Pro 55 Ser Phe Pro Ala Pro Ala Ala Ala Gly Leu Arg Ser Leu Leu Thr Val 70 Ala Gly Ala Ser Asp Thr Ala Thr Glu Pro Gln Asp Gln Gln His Ser 90 Glu Thr Thr Pro Pro Pro Ala Ser Val Pro Thr Pro Glu Ser Gly Leu 105 110 Lys Val Arg Asp Thr Ser Asn Leu Lys Ile Ser Pro Arg His Asp Leu 120 Ala Met Ile Phe Thr Cys Lys Val Cys Glu Thr Arg Ser Met Lys Met 135 140 Ala Ser Arg Asp Ser Tyr Glu Asn Gly Val Val Val Arg Cys Gly 155 150 Gly Cys Asn Asn Leu His Leu Met Ala Asp Arg Leu Gly Trp Phe Gly 170 165 Glu Pro Gly Ser Ile Glu Asp Phe Leu Ala Thr Gln Gly Glu Glu Val 185 Lys Lys Gly Ser Thr Asp Thr Ile Ser Phe Thr Leu Asp Asp Leu Ala 200 195 Gly Ser Gln Val Ser Ser Lys Gly Pro Ser Glu Gln Asn 215 210

- (2) INFORMATION FOR SEQ ID NO:463:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 187 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..187
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482292
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:
- Met Ala Thr Thr Arg Leu Leu Pro Leu Leu Arg Arg Leu Ala Ala 1 5 10 15
- Ala Ile Ala Gly Ser Pro Ala Pro Tyr Ser Leu Arg Gly Pro Ser Phe 20 25 30
- Pro Ala Pro Ala Ala Gly Leu Arg Ser Leu Leu Thr Val Ala Gly
  35 40 45
- Ala Ser Asp Thr Ala Thr Glu Pro Gln Asp Gln Gln His Ser Glu Thr
  50 60
- Thr Pro Pro Pro Ala Ser Val Pro Thr Pro Glu Ser Gly Leu Lys Val
  65 70 75 80
- Arg Asp Thr Ser Asn Leu Lys Ile Ser Pro Arg His Asp Leu Ala Met 85 90 95
- Ile Phe Thr Cys Lys Val Cys Glu Thr Arg Ser Met Lys Met Ala Ser 100 105 110
- Arg Asp Ser Tyr Glu Asn Gly Val Val Val Val Arg Cys Gly Gly Cys
  115 120 125
- Asn Asn Leu His Leu Met Ala Asp Arg Leu Gly Trp Phe Gly Glu Pro

- (2) INFORMATION FOR SEQ ID NO:464:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 671 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..671
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482293
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:464: gctctttccc ccttgccccc ttcccagtct ccactctgag cactctcctc cgctctgctc ctttgctccc cacggcaaac cgtaaaccct agcctgaggg gcacccctgt cgcagccatg 120 ggcgccascg gaagctgcag ggcgagatcg accgcgtcct gaagaaggtc caggagggcg 180 tcgatgtctt tgacagcatc tggaataagg tctacgacac tgagaatgcc aaccagaagg 240 300 agaagttcga ggcggacctc aagaaggaga tcaagaagct gcagcggnta cagggaccag 360 atcaagacgt ggattcagtc cagcgagatc aaggacaaga aggctctgat ggatgctcga 420 aagcagattg aacgagagat ggaacgattt aaagtatgtg agaaggaaac aaaaactaag 480 gcattctcaa aagaagggtt aggtcagcaa ccaaaaacag atcccaaaga aaaggccaaa gctgaaacaa gagactggct taataatgtg gtgtgttgga atcctgaatt gctactctta 540 tgctcttatg ttttcatatc tgttttttgg tatactaact gaaccacact gttaaatcgc 600 aacatatgta tactattttg tttgagaata ccttggatct ttaattcatt tccgaggaca 660 tggtttgtgt c
- (2) INFORMATION FOR SEQ ID NO:465:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 132 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..132
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482294
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:
- Met Ser Leu Thr Ala Ser Gly Ile Arg Ser Thr Thr Leu Arg Met Pro 1 5 10 15
- Thr Arg Arg Arg Ser Ser Arg Arg Thr Ser Arg Arg Arg Ser Arg Ser 20 25 30
- Cys Ser Xaa Tyr Arg Asp Gln Ile Lys Thr Trp Ile Gln Ser Ser Glu 35 40 45
- Ile Lys Asp Lys Lys Ala Leu Met Asp Ala Arg Lys Gln Ile Glu Arg 50 55 60
- Glu Met Glu Arg Phe Lys Val Cys Glu Lys Glu Thr Lys Thr Lys Ala 65 70 75 80 Phe Ser Lys Glu Gly Leu Gly Gln Gln Pro Lys Thr Asp Pro Lys Glu
- 85 90 95

  Lys Ala Lys Ala Glu Thr Arg Asp Trp Leu Asn Asn Val Val Cys Trp

  100 105 110
- 100 105 110

  Asn Pro Glu Leu Leu Leu Cys Ser Tyr Val Phe Ile Ser Val Phe
  115 120 125

Trp Tyr Thr Asn 130

- (2) INFORMATION FOR SEQ ID NO:466:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 118 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..118
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482295
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

Met Pro Thr Arg Arg Arg Ser Ser Arg Arg Thr Ser Arg Arg Arg Ser 10

Arg Ser Cys Ser Xaa Tyr Arg Asp Gln Ile Lys Thr Trp Ile Gln Ser 25 20

Ser Glu Ile Lys Asp Lys Lys Ala Leu Met Asp Ala Arg Lys Gln Ile 40

Glu Arg Glu Met Glu Arg Phe Lys Val Cys Glu Lys Glu Thr Lys Thr 55

Lys Ala Phe Ser Lys Glu Gly Leu Gly Gln Gln Pro Lys Thr Asp Pro 70 75

Lys Glu Lys Ala Lys Ala Glu Thr Arg Asp Trp Leu Asn Asn Val Val 90 85

Cys Trp Asn Pro Glu Leu Leu Leu Cys Ser Tyr Val Phe Ile Ser 105 100

Val Phe Trp Tyr Thr Asn

115

- (2) INFORMATION FOR SEQ ID NO:467:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 77 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..77
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482296
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

Met Asp Ala Arg Lys Gln Ile Glu Arg Glu Met Glu Arg Phe Lys Val 10

Cys Glu Lys Glu Thr Lys Thr Lys Ala Phe Ser Lys Glu Gly Leu Gly 20 25

Gln Gln Pro Lys Thr Asp Pro Lys Glu Lys Ala Lys Ala Glu Thr Arg 45 40

Asp Trp Leu Asn Asn Val Val Cys Trp Asn Pro Glu Leu Leu Leu 55

Cys Ser Tyr Val Phe Ile Ser Val Phe Trp Tyr Thr Asn 75 70

- (2) INFORMATION FOR SEQ ID NO:468:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 868 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)

#### (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..868
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482297
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:468: gtccatgcat gggcatggaa tggatggatg tgaatgccac gaacgattcc gccccgccgg 60 ccaggtgaga gatgagcctc acggcggcct tccgtgccac caaaatcccg cgcgctcttc 120 ctccaaagtg cggtgagcct gccgcctcct cttcggcctc ggcgtccggg gatccgccgc 180 cgggggccgt gaagagtact aaggcgccgc cgccgtggtg cgtgtacctt atagcctcat 240 cccggatccg ccgcacgtac gtcggcgtca ccaccgattt ccctcgccgg ctgcggcaac 300 ataatggtga gttaaaaggt ggtgcaaaag cttcctctgc cggcaggcct tggaatctcg 360 catgeettgt tgaaggattt gecaacagaa gtgaageetg tgagtttgaa tegaaatgga 420 agatogtoto cogaaaaatt goacggaaaa gaactgagot tagcatgaag toagtgotgo 480 aacatcgaga agcagctttg agcagagtgg aaacattcat ggattgtagc cacctaaaaa 540 tcaaatggca gtcaagttga gaccatttaa tcacttgcac tatgcaggtg gcaggcatct 600 aacttggaga aacatcacca cttaagaatc ctcctgtctt ctagcagctc gtagcaaaga 660 taacttataa tottotgotg aaccatcaag atggotgotg ctatgottto ttaacatgaa 720 aaaccaagag tagccccagt ggaattctat gtttgatttt tttttctatg aacaattgtt 780 tecgaacaat aatatggate atgegaeace egtttgtaaa tgtaaattat aettatgtat 840 tgtaatcacc tatatttctt ctcattct
- (2) INFORMATION FOR SEQ ID NO:469:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 162 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..162
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482298
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

Met Ser Leu Thr Ala Ala Phe Arg Ala Thr Lys Ile Pro Arg Ala Leu 10 Pro Pro Lys Cys Gly Glu Pro Ala Ala Ser Ser Ala Ser Ala Ser

30 25 20

Gly Asp Pro Pro Pro Gly Ala Val Lys Ser Thr Lys Ala Pro Pro Pro 45 40

Trp Cys Val Tyr Leu Ile Ala Ser Ser Arg Ile Arg Arg Thr Tyr Val 55 50

Gly Val Thr Thr Asp Phe Pro Arg Arg Leu Arg Gln His Asn Gly Glu 70 Leu Lys Gly Gly Ala Lys Ala Ser Ser Ala Gly Arg Pro Trp Asn Leu

90 85 Ala Cys Leu Val Glu Gly Phe Ala Asn Arg Ser Glu Ala Cys Glu Phe

110 105 100 Glu Ser Lys Trp Lys Ile Val Ser Arg Lys Ile Ala Arg Lys Arg Thr

125 120 Glu Leu Ser Met Lys Ser Val Leu Gln His Arg Glu Ala Ala Leu Ser

140 135 Arg Val Glu Thr Phe Met Asp Cys Ser His Leu Lys Ile Lys Trp Gln 160 155 150 145

Ser Ser

- (2) INFORMATION FOR SEQ ID NO:470:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 642 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single

- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..642
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482299
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:470: aaatttttct ccagccgccg cgctcctgat ccttatctct gcgcgcgctg catcggcgcc 60 cgccgggagg gagtcccgcc cgcctcgtcc atgttgtggg tccgcaatat ccgccgcttc 120 gtcgacacgg gcgccggcct cggatccgag gccatcatgg aactggagac taaaaggata 180 240 ttgcttgaga ttttcaagga gcggcagcgn gaagagtgcc gaggctggtt ccatcccaag 300 tttttacaag aaacctgaag aaggatccat tagctctaga gttcaaaggt tggccaagta caggtttcta aagaaacaat cagagcttct gctgaatgct gatgatcttg atgccatgtg 360 ggtttgtctc agagaaaatt gtgttattga tgatgctact ggtgctgaaa agatgaatta 420 tgaagatttc tgccatatcg ccacagtctg cactgagtag attggtcaga aatgcaaacg 480 atttttcagc ccttcaaact tcatgaagtc tgcacggagc acttgcacag attgtttggc 540 taattacaag attatctcag tgttttggtt tgaatttaga gtatacttat gtatgaaata 600 ttgattggta ctcatttata ttatattaat tatattatta tt
- (2) INFORMATION FOR SEQ ID NO:471:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 85 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..85
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482300
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

Lys Phe Phe Ser Ser Arg Arg Ala Pro Asp Pro Tyr Leu Cys Ala Arg 10 5 Cys Ile Gly Ala Arg Arg Glu Gly Val Pro Pro Ala Ser Ser Met Leu

25 Trp Val Arg Asn Ile Arg Arg Phe Val Asp Thr Gly Ala Gly Leu Gly

40 Ser Glu Ala Ile Met Glu Leu Glu Thr Lys Arg Ile Leu Leu Glu Ile 60 55

Phe Lys Glu Arg Gln Xaa Glu Glu Cys Arg Gly Trp Phe His Pro Lys 75

Phe Leu Gln Glu Thr

85

- (2) INFORMATION FOR SEQ ID NO:472:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 152 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..152
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482301
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:
- Asn Phe Ser Pro Ala Ala Ala Leu Leu Ile Leu Ile Ser Ala Arg Ala 10
- Ala Ser Ala Pro Ala Gly Arg Glu Ser Arg Pro Pro Arg Pro Cys Cys 25
- Gly Ser Ala Ile Ser Ala Ala Ser Ser Thr Arg Ala Pro Ala Ser Asp

|     |      | 35    |      |     |     |      | 40   |     |     |     |     | 45  |     |     |     |
|-----|------|-------|------|-----|-----|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Arg  | Pro   | Ser  | Trp | Asn | Trp  | Arg  | Leu | Lys | Gly | Tyr | Cys | Leu | Arg | Phe |
|     | 50   |       |      |     |     | 55   |      |     |     |     | 60  |     |     |     |     |
| Ser | Arg  | Ser   | Gly  | Ser | Xaa | Lys  | Ser  | Ala | Glu | Ala | Gly | Ser | Ile | Pro | Ser |
| 65  |      |       |      |     | 70  |      |      |     |     | 75  |     |     |     |     | 80  |
| Phe | Tyr  | Lys   | Lys  | Pro | Glu | Glu  | Gly  | Ser | Ile | Ser | Ser | Arg | Val | Gln | Arg |
|     |      |       |      | 85  |     |      |      |     | 90  |     |     |     |     | 95  |     |
| Leu | Ala  | Lys   | Tyr  | Arg | Phe | Leu  | Lys  | Lys | Gln | Ser | Glu | Leu | Leu | Leu | Asn |
|     |      |       | 100  |     |     |      |      | 105 |     |     |     |     | 110 |     |     |
| Ala | Asp  | Asp   | Leu  | Asp | Ala | Met  | Trp  | Val | Cys | Leu | Arg | Glu | Asn | Cys | Val |
|     | -    | 115   |      |     |     |      | 120  |     |     |     |     | 125 |     |     |     |
| Ile | Asp  | Asp   | Ala  | Thr | Gly | Ala  | Glu  | Lys | Met | Asn | Tyr | Glu | Asp | Phe | Cys |
|     | 130  |       |      |     |     | 135  |      |     |     |     | 140 |     |     |     |     |
| His | Ile  | Ala   | Thr  | Val | Cys | Thr  | Glu  |     |     |     |     |     |     |     |     |
| 145 |      |       |      |     | 150 |      |      |     |     |     |     |     |     |     |     |
| (2) | INFO | DRMA? | rion | FOR | SEQ | ID 1 | 10:4 | 73: |     |     |     |     |     |     |     |

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 607 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..607
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482302
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:473: aagttcgatg gaatagctgg atccgtgacc gtgcaaccac ctcaaccgca tttcaggggc 60 120 aaggtettea teeegaatee teggeetegt eteceatete gtgeeetaca taaaateeag 180 acqccccqct ttaccccqtt cacqacqqct ccqcqcttqq qqctqttqaa qccqcctcca 240 qtqttqqqcq aggtqccgga tgtqcgttgg tcagtctgcg gccgccactg tctccacact ggtgtcgtgc ttggtttggt gacattgaag attatctctg gggcacgacg atgtcgttca 300 togotyctgc agottggttg cotcogatgg ctgcttgtca agogocgggg cotcacgcct 360 cgggacaact tgcgcgtcgt catcatccaa ctccattccc gtcgcagtca cgcgtgaggt 420 480 cacqtqtaat ttgaagatca ttctcgtacc tggaatctaa agtcccaggt caagaacagg taccacagga tgaggggcat ggaggtggct gcgatgtgtt cgtgagargt ctaggtcgtc 540 gtctcccagt caactttggg ttgctggatc gttgtctcct tacgatgtat ttatttattt . 600 yatatag
- (2) INFORMATION FOR SEQ ID NO:474:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 138 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..138
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482303
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:
- Lys Phe Asp Gly Ile Ala Gly Ser Val Thr Val Gln Pro Pro Gln Pro 1 10 15 15 His Phe Arg Gly Lys Val Phe Ile Pro Asn Pro Arg Pro Arg Leu Pro 20 25 30 Ser Arg Ala Leu His Lys Ile Gln Thr Pro Arg Phe Thr Pro Phe Thr  $\frac{35}{40}$   $\frac{45}{45}$
- Thr Ala Pro Arg Leu Gly Leu Leu Lys Pro Pro Pro Val Leu Gly Glu
  50 55 60
  Val Pro Asp Val Arg Trp Ser Val Cys Gly Arg His Cys Leu His Thr

- 130 135
- (2) INFORMATION FOR SEQ ID NO:475: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 546 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..546
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482307
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

aaaccctagc cattttcttt tcttatcccc agccgccaca aagacagccg gccgcctggg 60 aactttttt tctttcttc ttcctggccg accgcacctc ccacttctct ctatttttt 120 teettqeace atqqettqqc aaacqqatet aqqetqqett cetetette tqttettete 180 ctgctctgtt ctttgcttct ttcttcccca ccgaacagct caaaccggtg agctagccgc 240 tgcctgagcg cgcagcsggc tcacatatcc gaggatgacc ggattaatgt tcaggggcat 300 gegggtttta eegeeggtgt gegegteece teggtaggge gegeegeegt eggteaaaeg 360 ccgacagatg tccctgttga cagcagagaa aaggggtcga cctcttggtc gacttctgtg 420 actgtgcacg cccagatctt atctccctta cctctttgac tcgatctcgt tctctgtgat 480 gtatgagatg gatctaatgt aatattcggg atcgagttat gagttgatag aacgtagatt 540 ttctgc

- (2) INFORMATION FOR SEQ ID NO:476:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 81 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..81
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482308
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

Asn Pro Ser His Phe Leu Phe Leu Ser Pro Ala Ala Thr Lys Thr Ala 1 5 10 15

Gly Arg Leu Gly Thr Phe Phe Ser Phe Leu Leu Pro Gly Arg Pro His 20 25 30

Leu Pro Leu Leu Ser Ile Phe Phe Pro Cys Thr Met Ala Trp Gln Thr 35 40 45

Asp Leu Gly Trp Leu Pro Leu Phe Leu Phe Phe Ser Cys Ser Val Leu 50 60

Cys Phe Phe Leu Pro His Arg Thr Ala Gln Thr Gly Glu Leu Ala Ala 65 70 75 80 Ala

- (2) INFORMATION FOR SEQ ID NO:477:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 49 amino acids
    - (B) TYPE: amino acid

- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..49
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482309
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

Thr Leu Ala Ile Phe Phe Ser Tyr Pro Gln Pro Pro Gln Arg Gln Pro 1 5 10 15

Ala Ala Trp Glu Leu Phe Phe Leu Phe Phe Leu Ala Asp Arg Thr 20 25 30

Ser His Phe Ser Leu Phe Phe Leu Ala Pro Trp Leu Gly Lys Arg 35 40 45

Ile

- (2) INFORMATION FOR SEQ ID NO:478:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 742 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..742
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482322
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:478: 60 atttgctcac cacgcccage accgcageta gtccattgca ttgacgcctc gatcagggct agegacggac gaaagaaagc tetgeatgea gegeetegee geegeegteg teeceageet 120 180 qqtqccqccq ctctacctqt ccatqqccqc ctccqccqct qccqqctqtt ttccaqcaqa ageageegge agtagtagee ggaegaegae gtegaegeeg aegeegaege ggeggeeatt 240 300 attagegeas egeegtggeg ggtggtgeta etgaegetee tgetgetgge geegagetge tqccaqqcqa cqcqaqqcat qcaqccqttc aggggcaagc cgctgcggcc aggcaccgcc 360 420 aaccatttcc tqqqqttctt qccqcgqgga ccggcgcctc cgtccggccc ctcgcggcag cacaactcca teggagegea ggateaaage catecetgae ggegacegea ggaetgaage 480 qtqqaaqaaq caqqqccqcc gtcgtqtcga tgttcggatc cgaggagtaa gatctccacc 540 aaatcaaqaq aqttcqcatc accatqqatt aqqttccttq tcaaaaqqtt aagctcqtaq 600 660 tattgattat ttagctagtt tcgtagcact agcagcaata gatgtatact cggagaggga 720 acgaagaaaa ggcacgttct ttgtaggacg atgtacatga ggctatattt tttttgttgg ggatgggtgt ggtggcgtct cg
- (2) INFORMATION FOR SEQ ID NO:479:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 64 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..64
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482323
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:
- Ile Cys Ser Pro Arg Pro Ala Pro Gln Leu Val His Cys Ile Asp Ala 1 5 10 15
- Ser Ile Arg Ala Ser Asp Gly Arg Lys Lys Ala Leu His Ala Ala Pro 20 25 30
- Arg Arg Arg Arg Pro Gln Pro Gly Ala Ala Ala Leu Pro Val His

Gly Arg Leu Arg Arg Cys Arg Leu Phe Ser Ser Arg Ser Ser Arg Gln 50 60

- (2) INFORMATION FOR SEQ ID NO:480:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 62 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..62
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482324
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

Met Gln Arg Leu Ala Ala Ala Val Val Pro Ser Leu Val Pro Pro Leu

1 10 15

Tyr Leu Ser Met Ala Ala Ser Ala Ala Ala Gly Cys Phe Pro Ala Glu 20 25 30

Ala Ala Gly Ser Ser Ser Arg Thr Thr Thr Ser Thr Pro Thr Pro Thr 35 40 45

Arg Arg Pro Leu Leu Ala Xaa Arg Arg Gly Gly Trp Cys Tyr 50 55 60

- (2) INFORMATION FOR SEQ ID NO:481:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 46 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..46
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482325
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

Met Gln Pro Phe Arg Gly Lys Pro Leu Arg Pro Gly Thr Ala Asn His

1 10 15

Phe Leu Gly Phe Leu Pro Arg Gly Pro Ala Pro Pro Ser Gly Pro Ser 20 25 30

Arg Gln His Asn Ser Ile Gly Ala Gln Asp Gln Ser His Pro 35 40 45

- (2) INFORMATION FOR SEQ ID NO:482:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 587 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..587
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482334
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

| acgacccaca | ccgctgccgc | caccgctgcc | gacgtakbca | cggccgctcc | ccgacccaca | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cctcgcacta | tgtssccccc | accgccgccg | cctcccctct | agatcctcaa | tgcactgcta | 120 |
| ggtcccgtcc | acagccgctc | actgccgcca | cctctaacgc | gcctaggacc | atcgccacct | 180 |
| ccacatctag | cttctggagt | cgagatccat | ggtcgactcc | cctggaggag | cccggatctg | 240 |
| gcctaccggg | cacggtctcg | agctttaggc | gtctcagcag | gcagcgcggt | gtactccgtc | 300 |

ategeceaat ggageageeg aceaageaag aactetatee gtgetegtge egaggegetg 360 tetetactet etacteeate tgttetgtte eegegeetge gegtegteet etacggatee 420 gteeacegee gegeeasace atgtgaactg agacaegeet emacetatge atecaagaea 480 casetetgea tetgegteeg tgeactgget acaetggate gattaeggag tggagggtgt 540 tetttacaaa gaaagettgt acettaaaac aggaggatac aagaagt

- (2) INFORMATION FOR SEQ ID NO:483:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 147 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..147
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482335
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:
- Asp Pro His Arg Cys Arg His Arg Cys Arg Arg Xaa His Gly Arg Ser

  1 10 15

Pro Thr His Thr Ser His Tyr Xaa Xaa Pro Thr Ala Ala Ala Ser Pro
20 25 30

Leu Asp Pro Gln Cys Thr Ala Arg Ser Arg Pro Gln Pro Leu Thr Ala 35 40 45

Ala Thr Ser Asn Ala Pro Arg Thr Ile Ala Thr Ser Thr Ser Ser Phe 50 60

Trp Ser Arg Asp Pro Trp Ser Thr Pro Leu Glu Glu Pro Gly Ser Gly 65 70 75 80

Leu Pro Gly Thr Val Ser Ser Phe Arg Arg Leu Ser Arg Gln Arg Gly 85 90 95

Val Leu Arg His Arg Pro Met Glu Gln Pro Thr Lys Gln Glu Leu Tyr 100 105 110

Pro Cys Ser Cys Arg Gly Ala Val Ser Thr Leu Tyr Ser Ile Cys Ser 115 120 125

Val Pro Ala Pro Ala Arg Arg Pro Leu Arg Ile Arg Pro Pro Pro Arg 130 135 140

Xaa Thr Met

145

- (2) INFORMATION FOR SEQ ID NO:484:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 543 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..543
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482336
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

| gcttgtgaag | acagaaaacg | attcctctcc | cctccctccc | agctctggac | gcgtgamgct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cggcggcggc | cgcatcctcg | gctcctcgcc | tcacctcccg | gtccatcctc | gccgctctgc | 120 |
| gcgtgcctca | cctcgacacc | agccttccct | cgtgacacga | ctgcaacctc | gctgacggag | 180 |
| agtacgtcct | cgtgccggag | caaggtattg | ctcaggaggt | agcccccaga | tccagcacca | 240 |
| gagcctgcac | cagaggatct | gcctgccact | gctttggaag | gttctttgga | ggacatggtt | 300 |
| gctggagtga | cttggccgtc | catcttgcca | ccgggttgga | cagtcgagtg | ggatcctgcc | 360 |
| tcggctgagg | aggagcatga | ggagtgatgg | gacaggcttc | cccatccctc | catttaatta | 420 |
| tcgttagttt | tattgccgct | gcacttcgaa | caatgatggc | aacttttgaa | aaactccgat | 480 |
| ggtgatgtaa | taatttagta | ctccttgatg | tatgatttta | tgtcttattg | tatttgctct | 540 |
| gtg        |            |            |            |            |            |     |

60

120

180

240 300

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| (2) INFORMATION FOR SEQ ID NO:485:   |
|--|
| (i) SEQUENCE CHARACTERISTICS:  |
| (A) LENGTH: 73 amino acids   |
| (B) TYPE: amino acid (C) STRANDEDNESS:   |
| (D) TOPOLOGY: linear   |
| (ii) MOLECULE TYPE: peptide  |
| (ix) FEATURE:  |
| (A) NAME/KEY: peptide  |
| (B) LOCATION: 173  |
| (D) OTHER INFORMATION: / Ceres Seq. ID 1482337 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:485: |
| Ala Cys Glu Asp Arg Lys Arg Phe Leu Ser Pro Pro Ser Gln Leu Trp                          |
| 1 5 10 15  |
| Thr Arg Xaa Ala Arg Arg Arg Pro His Pro Arg Leu Leu Ala Ser Pro 20 25 30                 |
| Pro Gly Pro Ser Ser Pro Leu Cys Ala Cys Leu Thr Ser Thr Pro Ala 35 40 45                 |
| Phe Pro Arg Asp Thr Thr Ala Thr Ser Leu Thr Glu Ser Thr Ser Ser 50 55 60                 |
| Cys Arg Ser Lys Val Leu Leu Arg Arg<br>65 70   |
| (2) INFORMATION FOR SEQ ID NO:486:   |
| <ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 57 amino acids</li></ul>       |
| (B) TYPE: amino acid   |
| (C) STRANDEDNESS:  |
| (D) TOPOLOGY: linear   |
| (ii) MOLECULE TYPE: peptide  |
| <pre>(ix) FEATURE:    (A) NAME/KEY: peptide</pre>  |
| (B) LOCATION: 157  |
| (D) OTHER INFORMATION: / Ceres Seq. ID 1482338   |
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:  |
| Leu Val Lys Thr Glu Asn Asp Ser Ser Pro Leu Pro Pro Ser Ser Gly 1 10 15                  |
| Arg Val Xaa Leu Gly Gly Gly Arg Ile Leu Gly Ser Ser Pro His Leu 20 25 30                 |
| Pro Val His Pro Arg Arg Ser Ala Arg Ala Ser Pro Arg His Gln Pro 35 40 45                 |
| Ser Leu Val Thr Arg Leu Gln Pro Arg 50 55  |
| (2) INFORMATION FOR SEQ ID NO:487:   |
| (i) SEQUENCE CHARACTERISTICS:  |
| (A) LENGTH: 633 base pairs   |
| (B) TYPE: nucleic acid   |
| <pre>(C) STRANDEDNESS: single (D) TOPOLOGY: linear</pre>                                 |
| (ii) MOLECULE TYPE: DNA (genomic)  |
| (ix) FEATURE:  |
| (A) NAME/KEY: -  |
| (B) LOCATION: 1633 (D) OTHER INFORMATION: / Ceres Seq. ID 1482339                        |
| (xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:  |
| acgccgagca ctccttctcc tcctcctctg tcggcggtcg tgggagacgt acacggcgat                        |
| taggaggcac gtcgtccacc agtctcctcg cagggatgtc gaagagcacg gaaatcgcag                        |
| ataaagcaat catcttgatg caggatcatg ccaagcatat ctatcgtatt tgcaatgaga                        |

agctaatatt gggtaaagga ttgactgcat ttgaggtcaa agaacttcgt gaagcacttg

aattcgccgc cgaaggattg gaccagggct cccttttttg ccaagaggaa ttggatgcaa

ctgttaagga ggaacaattg gagcatgacg agaaggtggc ttcacagatg attgaaagcc 360 cacttccttc tcctgattcg gactgcttcc tatcccttga agagcacatt gagaagtttt 420 ggggcgttga ttacaactcg gaccagatgc ctagctactc cgactaggct cagagtttat 480 ggtgctgtga aattctagat gtttgggtgt aatggtattt tggatgtgta tgtgaactgt 540 aattctggat gtgtggatgt aatggtgaac tgactgaatg gtgtcttgtg taatggtatt 600 ttggatgtct atgtgaactc tagctctggg ttt

- (2) INFORMATION FOR SEQ ID NO:488:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 154 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..154
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482340
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:
- Ala Glu His Ser Phe Ser Ser Ser Ser Val Gly Gly Arg Gly Arg Arg
- Thr Arg Arg Leu Gly Gly Thr Ser Ser Thr Ser Leu Leu Ala Gly Met
  20 25 30
- Ser Lys Ser Thr Glu Ile Ala Asp Lys Ala Ile Ile Leu Met Gln Asp 35 40 45
- His Ala Lys His Ile Tyr Arg Ile Cys Asn Glu Lys Leu Ile Leu Gly
- Lys Gly Leu Thr Ala Phe Glu Val Lys Glu Leu Arg Glu Ala Leu Glu 65 70 75 80
- Phe Ala Ala Glu Gly Leu Asp Gln Gly Ser Leu Phe Cys Gln Glu Glu
  85 90 95
- Leu Asp Ala Thr Val Lys Glu Glu Gln Leu Glu His Asp Glu Lys Val 100 105 110
- Ala Ser Gln Met Ile Glu Ser Pro Leu Pro Ser Pro Asp Ser Asp Cys 115 120 125
- Phe Leu Ser Leu Glu Glu His Ile Glu Lys Phe Trp Gly Val Asp Tyr 130 135 140
- Asn Ser Asp Gln Met Pro Ser Tyr Ser Asp 145
- (2) INFORMATION FOR SEQ ID NO:489:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 123 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..123
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482341
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:
- Met Ser Lys Ser Thr Glu Ile Ala Asp Lys Ala Ile Ile Leu Met Gln
  1 10 15
- Asp His Ala Lys His Ile Tyr Arg Ile Cys Asn Glu Lys Leu Ile Leu 20 25 30
- Gly Lys Gly Leu Thr Ala Phe Glu Val Lys Glu Leu Arg Glu Ala Leu 35 40 45
- Glu Phe Ala Ala Glu Gly Leu Asp Gln Gly Ser Leu Phe Cys Gln Glu 50 55 60
- Glu Leu Asp Ala Thr Val Lys Glu Glu Gln Leu Glu His Asp Glu Lys

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Client Docket No. 80142.004 80 70 75 65 Val Ala Ser Gln Met Ile Glu Ser Pro Leu Pro Ser Pro Asp Ser Asp 90 85 Cys Phe Leu Ser Leu Glu Glu His Ile Glu Lys Phe Trp Gly Val Asp 105 Tyr Asn Ser Asp Gln Met Pro Ser Tyr Ser Asp 115 120 (2) INFORMATION FOR SEQ ID NO:490: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 109 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..109 (D) OTHER INFORMATION: / Ceres Seq. ID 1482342 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:490: Met Gln Asp His Ala Lys His Ile Tyr Arg Ile Cys Asn Glu Lys Leu

Ile Leu Gly Lys Gly Leu Thr Ala Phe Glu Val Lys Glu Leu Arg Glu 25 Ala Leu Glu Phe Ala Ala Glu Gly Leu Asp Gln Gly Ser Leu Phe Cys 40 Gln Glu Glu Leu Asp Ala Thr Val Lys Glu Glu Gln Leu Glu His Asp Glu Lys Val Ala Ser Gln Met Ile Glu Ser Pro Leu Pro Ser Pro Asp 75 70 Ser Asp Cys Phe Leu Ser Leu Glu Glu His Ile Glu Lys Phe Trp Gly 90 85

Val Asp Tyr Asn Ser Asp Gln Met Pro Ser Tyr Ser Asp 100 105

- (2) INFORMATION FOR SEQ ID NO:491:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 827 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..827
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482346
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:491: 60 cctaatcgaa aaatcgaaaa cccaccgcac cctttcatca gcctgcctgt ccactgttgg 120 cttggtgact tcctccgctc cgctccgctc ccctccgctc ccgaacggtc gatctttgca 180 tggcagcagc agctggctcc aaggggcggg cgatcgctgg aagcttcgtc agccgcgtcc tegeeggeaa ggeegeeteg eegaggaggg eegtgeacge eteggegtae gacaagaace 240 300 tggaggacca ggtgcgcccg gcgttcgtgc cggacgatgt gatcggcagc gccggngagc 360 cccgacaagt actggagccc ccaccccaag accggcgtct tcggcccggc ggcggtggac cccaagctgg ccgctggtgg cgccgccgga cgccggcgcg gawtgctgca ggaggcacgg 420 tgctggacca gaaggtgtgg ttccgcccgc tcgaggacgt cgagaagccg ccccccgccg 480 540 cgtgagccgc gcggcgctgc taggccagcc cacactgctg ctcgctcata aaaagggcgg cgggagagcc tggcagtggc aggcactctg ctcgtgctcg gccgggctgg gctccctgct 600 tatatcactg caatattata ctactagtag tggtgcttga tagcagtgtg tggctgtgct 660 aataccagta taatactggt tctactataa tacagtcgta tcaggcatgg cgtgcatcag 720 780 gactggttgt gatagtagca acgtgatgct cgtgcctgta ataagaacaa gcaggcgatg tqtqcctqtg atgtaccggt gtcgtcagtg ttataagtac ttggggc

(2) INFORMATION FOR SEQ ID NO:492: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 212 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..212 (D) OTHER INFORMATION: / Ceres Seq. ID 1482347 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:492: Leu Ile Glu Lys Ser Lys Thr His Arg Thr Leu Ser Ser Ala Cys Leu 10 Ser Thr Val Gly Leu Val Thr Ser Ser Ala Pro Leu Arg Ser Pro Pro 2.5 2.0 Leu Pro Asn Gly Arg Ser Leu His Gly Ser Ser Ser Trp Leu Gln Gly 40 Ala Gly Asp Arg Trp Lys Leu Arg Gln Pro Arg Pro Arg Arg Gln Gly 55 Arg Leu Ala Glu Glu Gly Arg Ala Arg Leu Gly Val Arg Gln Glu Pro 75 70 Gly Gly Pro Gly Ala Pro Gly Val Arg Ala Gly Arg Cys Asp Arg Gln 90 85 Arg Arg Xaa Ala Pro Thr Ser Thr Gly Ala Pro Thr Pro Arg Pro Ala 105 Ser Ser Ala Arg Arg Arg Trp Thr Pro Ser Trp Pro Leu Val Ala Pro 125 120 Pro Asp Ala Gly Ala Xaa Cys Cys Arg Arg His Gly Ala Gly Pro Glu 135 140 Gly Val Val Pro Pro Ala Arg Gly Arg Arg Glu Ala Ala Pro Arg Arg 155 150 Val Ser Arg Ala Ala Leu Leu Gly Gln Pro Thr Leu Leu Leu Ala His 165 170 Lys Lys Gly Gly Gly Arg Ala Trp Gln Trp Gln Ala Leu Cys Ser Cys 190 185 Ser Ala Gly Leu Gly Ser Leu Leu Ile Ser Leu Gln Tyr Tyr Thr Thr 205 200 195 Ser Ser Gly Ala 210 (2) INFORMATION FOR SEQ ID NO:493: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 121 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..121 (D) OTHER INFORMATION: / Ceres Seq. ID 1482348 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:493: Met Ala Ala Ala Gly Ser Lys Gly Arg Ala Ile Ala Gly Ser Phe 10 Val Ser Arg Val Leu Ala Gly Lys Ala Ala Ser Pro Arg Arg Ala Val 25 His Ala Ser Ala Tyr Asp Lys Asn Leu Glu Asp Gln Val Arg Pro Ala 45 40

Phe Val Pro Asp Asp Val Ile Gly Ser Ala Xaa Glu Pro Arg Gln Val

- (2) INFORMATION FOR SEQ ID NO:494:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 767 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:

115

- (A) NAME/KEY: -
- (B) LOCATION: 1..767
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482349
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:494: awrctcgcat cgcgtccttc tcttcccaac ttcctcgcgt tcatttcttc accccacccg ccccaaacg ccaaatctaa cagcaaaggt ccggaacctt ctagccgcac ctagggtttg 120 180 gattggcgcc gagcatggcg tacgtcgacc acgccttctc catctccgac gaggacgacc 240 tcgtcggmgg cgccatgggg ggcccgcgcg gggcgcmcgt gaaggagatc gccttcgccg 300 ccgcgctgct cgmcttcggg gcgbtcggta ccatcaggtg gcctgctaat ggctgtcaac cgcgtcggag gggaccgcgc gcacggaatt ttcttcatga tgttgggcat tgtaatgttc 360 atccctgggt tctactacac aaggatcgcc tactatgctt acaaaggtta caagggtttc 420 tctttttcga acatcccacc gatctgaagg agtgtgctgc ctgcctggct ggtcatgaag 480 tggtgtcgct ggtttaagag tttgtcgact ctgtcgaatg gctctgtaga cacccttgtt 540 600 ctacatcttt ctgtggccac attctctttg aacactctag aatgaactgg tggatgtgta 660 cagataaatg cagccatagt tgtgctccat cgctgtttgg ccgattggaa ggttgtttgt tgtgctagtg tgaccatgtt caactgatac gcattgctac ttgtgcatta ctatcgtttt 720 tgtcagggac cttaaatcat tatatgggaa taagatctcg tcgttcc
- (2) INFORMATION FOR SEQ ID NO:495:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 95 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..95
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482350
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

Xaa Ser His Arg Val Leu Leu Phe Pro Thr Ser Ser Arg Ser Phe Leu
1 10 15

His Pro Thr Arg Pro Gln Thr Pro Asn Leu Thr Ala Lys Val Arg Asn 20 25 30

Leu Leu Ala Ala Pro Arg Val Trp Ile Gly Ala Glu His Gly Val Arg
35 40 45

Arg Pro Arg Leu Leu His Leu Arg Arg Gly Arg Pro Arg Arg Xaa Arg 50 55 60

His Gly Gly Pro Ala Arg Gly Xaa Arg Glu Gly Asp Arg Leu Arg Arg

65 70 75 80

Arg Ala Ala Xaa Leu Arg Gly Xaa Arg Tyr His Gln Val Ala Cys 85 90 95

(2) INFORMATION FOR SEQ ID NO:496:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 120 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..120
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482351
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:
- Met Ala Tyr Val Asp His Ala Phe Ser Ile Ser Asp Glu Asp Asp Leu 1 5 10 15
- Val Xaa Gly Ala Met Gly Gly Pro Arg Gly Ala Xaa Val Lys Glu Ile 20 25 30
- Ala Phe Ala Ala Ala Leu Leu Xaa Phe Gly Ala Xaa Gly Thr Ile Arg
  35 40 45
- Trp Pro Ala Asn Gly Cys Gln Pro Arg Arg Gly Pro Arg Ala Arg
  50 60
- Asn Phe Leu His Asp Val Gly His Cys Asn Val His Pro Trp Val Leu 65 70 75 80
- Leu His Lys Asp Arg Leu Leu Cys Leu Gln Arg Leu Gln Gly Phe Leu 85 90 95
- Phe Phe Glu His Pro Thr Asp Leu Lys Glu Cys Ala Ala Cys Leu Ala 100 105 110
- Gly His Glu Val Val Ser Leu Val 115 120
- (2) INFORMATION FOR SEQ ID NO:497:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 100 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
    - (ii) MOLECULE TYPE: peptide
    - (ix) FEATURE:
      - (A) NAME/KEY: peptide
      - (B) LOCATION: 1..100
      - (D) OTHER INFORMATION: / Ceres Seq. ID 1482352
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:
- Met Gly Gly Pro Arg Gly Ala Xaa Val Lys Glu Ile Ala Phe Ala Ala 1 5 10 15
- Ala Leu Leu Xaa Phe Gly Ala Xaa Gly Thr Ile Arg Trp Pro Ala Asn
  20 25 30
- Gly Cys Gln Pro Arg Arg Gly Pro Arg Ala Arg Asn Phe Leu His
- Asp Val Gly His Cys Asn Val His Pro Trp Val Leu Leu His Lys Asp 50 55 60
- Arg Leu Leu Cys Leu Gln Arg Leu Gln Gly Phe Leu Phe Phe Glu His 70 75 80
- Pro Thr Asp Leu Lys Glu Cys Ala Ala Cys Leu Ala Gly His Glu Val 85 90 95
- Val Ser Leu Val

100

- (2) INFORMATION FOR SEQ ID NO:498:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1072 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1072
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482353
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:498: acatcacaaa ccgaaaaarg ccgcgacgag ccgacgatct ctactgcccc cttccggcct 60 toggogaccg tgacgagcaa cgacgacgac ggcgacgatg gccgcttcct ccctctgcca 120 180 cqqqcacttq ctcctqtttc tcctcqtgtc cgtcacatcg gcctgcctcg gtaccgcggc 240 asscantcaa qccqqqtctq qaqaqgqcta cacgatcgcc ggccgcgtca agatcgatgg catgagtgag aagggctatg gtcttccagc caagacatca aacacaaaag tgatacttaa 300 360 tggcggccaa agggttacat ttgccaggcc agacggctac tttgcattcc acaacgtgcc agctggaact catctgattg aggtctcctc aattggttac ttcttttccc ctgtccgagt 420 480 tgatataagt gcaaggaatc ctggatatat tcaagcagca ttgactgaaa ccagaagagt tctgaatgag cttgttctgg aacctctgaa agaagagcag tactttgagg ttagggagcc 540 gttctccgtc atgtcacttt tgaagagccc catggggtta atggttggtt ttatggtctt 600 660 aatggtcttc gtgatgccca agatgatgga gaacatagat cccgaggaga tgaagcaagc tcaagwacaa atgaggaaca accctgtatc attctctggc ttgctcgcca gagcgcaggg 720 780 ctagagaagt agactgtaga catgaggata ctgcaaaggt caaacattct agaatgtgag 840 taagagcact attaaagtgc ttggcacgtc actcactcgg ggcaatttcc tggggataag aaggaaatcc tttccccctg tttttaccgt attttagggc tagtttggga acaccaattt 900 tccaaaggat ttatattttc ccatgggaaa atgaactaat tttccttggg aaaatgaaaa 960 tctcttggaa aattggggtt ccaaactagy ccttaagtta taatttgtct gcggtgtaga 1020 accttctgaa acctctgagc tagtgatgcg tcagattgag atattttgtt cg
- (2) INFORMATION FOR SEQ ID NO:499: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 208 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..208

150

165

- (D) OTHER INFORMATION: / Ceres Seq. ID 1482354
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:499: Met Ala Ala Ser Ser Leu Cys His Gly His Leu Leu Leu Phe Leu Leu
- 10 Val Ser Val Thr Ser Ala Cys Leu Gly Thr Ala Ala Xaa Xaa Gln Ala 20 Gly Ser Gly Glu Gly Tyr Thr Ile Ala Gly Arg Val Lys Ile Asp Gly 40 Met Ser Glu Lys Gly Tyr Gly Leu Pro Ala Lys Thr Ser Asn Thr Lys Val Ile Leu Asn Gly Gly Gln Arg Val Thr Phe Ala Arg Pro Asp Gly 70 Tyr Phe Ala Phe His Asn Val Pro Ala Gly Thr His Leu Ile Glu Val 85 90 Ser Ser Ile Gly Tyr Phe Phe Ser Pro Val Arg Val Asp Ile Ser Ala 105 Arg Asn Pro Gly Tyr Ile Gln Ala Ala Leu Thr Glu Thr Arg Arg Val 125 120 Leu Asn Glu Leu Val Leu Glu Pro Leu Lys Glu Glu Gln Tyr Phe Glu 140 135 Val Arg Glu Pro Phe Ser Val Met Ser Leu Leu Lys Ser Pro Met Gly 160

Leu Met Val Gly Phe Met Val Leu Met Val Phe Val Met Pro Lys Met

Met Glu Asn Ile Asp Pro Glu Glu Met Lys Gln Ala Gln Xaa Gln Met

155

170

480

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180 185 190
Arg Asn Asn Pro Val Ser Phe Ser Gly Leu Leu Ala Arg Ala Gln Gly
195 200 205

- (2) INFORMATION FOR SEQ ID NO:500:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 160 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..160
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482355

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

Met Ser Glu Lys Gly Tyr Gly Leu Pro Ala Lys Thr Ser Asn Thr Lys

1 5 10 15

Val Ile Leu Asn Gly Gly Gln Arg Val Thr Phe Ala Arg Pro Asp Gly

Val Ile Leu Asn Gly Gly Gln Arg Val Thr Phe Ala Arg Pro Asp Gly 20 25 30

Tyr Phe Ala Phe His Asn Val Pro Ala Gly Thr His Leu Ile Glu Val 35 40 45

Ser Ser Ile Gly Tyr Phe Phe Ser Pro Val Arg Val Asp Ile Ser Ala 50 60

Arg Asn Pro Gly Tyr Ile Gln Ala Ala Leu Thr Glu Thr Arg Arg Val 65 70 75 80

Leu Asn Glu Leu Val Leu Glu Pro Leu Lys Glu Glu Gln Tyr Phe Glu 85 90 95

Val Arg Glu Pro Phe Ser Val Met Ser Leu Leu Lys Ser Pro Met Gly
100 105 110

Leu Met Val Gly Phe Met Val Leu Met Val Phe Val Met Pro Lys Met 115 120 125

Met Glu Asn Ile Asp Pro Glu Glu Met Lys Gln Ala Gln Xaa Gln Met 130 135 140

Arg Asn Asn Pro Val Ser Phe Ser Gly Leu Leu Ala Arg Ala Gln Gly 145 150 155 160

- (2) INFORMATION FOR SEQ ID NO:501:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 803 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..803
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482356

agcactactg tactgtactg tagtaacata ctactactgc tgctgctcac agcaagaaca

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

accaacctca cctactgttc tgggttgaaa tcttgcggaa agtctgccaa aacaaaaaac 60

aaaagtcctt gcaggtggtt tggcaggcta aacttgacgt ttgcgttggc aggaagccgt 120

ggctgctgta atctaatctg ctgctgcaat ctccgacccg tctcccagac ttgactgtac

ctgaaaccac tattgaaaca atcggtgaga gcgagagaga aaattaaaga gaaacccgac 240

aaaaaccaac caaccaagca gctctccgtt ccatatagcc gctgcatcag atccattcaa 300

gaactagagc caagccacca acaataaatt cctctggccg gcctgcctca tcagctcggt 360

tcaaaaaaaa caaaaaaaa agaagtcgca gcggcagtag taaactgcag tgacatacgg 420

540

600

660

720

780

60

120

180

aggatacgat aaaaaagaac caaggcaaaa agctaaggtc ctgtttggga acaaagtttt tgaaaaccac agtttttgaa atactatact atactttagt tataacaata ccgtagttta taataccgca gttttgaaaa ctgaggtcca gagctaagtt tagaatgcct taaaacaact atagtatttg caatacttca gttttgaaaa cagagatttt acctagcttg ccaaacacca ttatgtatat aatactgcag tatttgagaa tactgcagta ttcttccaaa actgcagaaa aactttqttc ccaaacaccc cct (2) INFORMATION FOR SEQ ID NO:502: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 57 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..57 (D) OTHER INFORMATION: / Ceres Seq. ID 1482357 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:502: Thr Asn Leu Thr Tyr Cys Ser Gly Leu Lys Ser Cys Gly Lys Ser Ala 10 5 Lys Thr Lys Asn Lys Ser Pro Cys Arg Trp Phe Gly Arg Leu Asn Leu 30 25 20 Thr Phe Ala Leu Ala Gly Ser Arg Gly Cys Cys Asn Leu Ile Cys Cys Cys Asn Leu Arg Pro Val Ser Gln Thr (2) INFORMATION FOR SEQ ID NO:503: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 42 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..42 (D) OTHER INFORMATION: / Ceres Seq. ID 1482358 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:503: Gln Pro His Leu Leu Phe Trp Val Glu Ile Leu Arg Lys Val Cys Gln 10 5 Asn Lys Lys Gln Lys Ser Leu Gln Val Val Trp Gln Ala Lys Leu Asp 3.0 25 20 Val Cys Val Gly Arg Lys Pro Trp Leu Leu 35 (2) INFORMATION FOR SEQ ID NO:504: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 517 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..517 (D) OTHER INFORMATION: / Ceres Seq. ID 1482359 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:504: gtagacgacg tgcatgtgtr gccggccaat ttacgcgccg ccacatgctc tgctcgccca tcgctttcga gctttgtgta aatggactag agcggaaggc atagcatgca taggaatagg

agcaactaac caccggcctc tcgctccctc gctgcgccat aaggctgcga ctgcgagagc

cagccgcacccgcaccagtccataggccggcctcctctcttaccttcccacacccttct240cgaccgtacgtagcctagttgtgcttggtagccagccagaaggtcgtcggccgatgatgg300gaggaagaacagtggcccgccgctcgtctcgcgctggtgaccatcatcgccatcggcg360gcggccgarggggacgaggtgaagtgtggcgggtrctctccgtrcrgcggcrccgactgc420mcggtgctgtacccgthnmmgcscccrccgccgtactactactacagcmctmccccaccc480gcgacctaccccggggagtcctcgtcatactaccagc

- (2) INFORMATION FOR SEQ ID NO:505:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 63 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..63
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482360
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

Met Cys Xaa Arg Pro Ile Tyr Ala Pro Pro His Ala Leu Leu Ala His

Arg Phe Arg Ala Leu Cys Lys Trp Thr Arg Ala Glu Gly Ile Ala Cys 20 25 30

Ile Gly Ile Gly Ala Thr Asn His Arg Pro Leu Ala Pro Ser Leu Arg

His Lys Ala Ala Thr Ala Arg Ala Ser Arg Thr Arg Thr Ser Pro 50 55 60

- (2) INFORMATION FOR SEQ ID NO:506:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 74 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..74
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482361
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

Met Met Gly Gly Arg Thr Val Ala Pro Pro Leu Val Leu Ala Leu Val

Thr Ile Ile Ala Ile Gly Gly Gly Arg Xaa Gly Arg Gly Glu Val Trp
20 25 30

Arg Xaa Leu Ser Xaa Xaa Arg Xaa Arg Leu Xaa Gly Ala Val Pro Xaa 35 40 45

Xaa Xaa Pro Xaa Ala Val Leu Leu Leu Gln Xaa Xaa Pro Thr Arg Asp 50 55 60

Leu Pro Arg Gly Val Leu Val Ile Leu Pro 70

- (2) INFORMATION FOR SEQ ID NO:507:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 73 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..73
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482362

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..449
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482363
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:508: 60 aaagagaaag tttattacga tgtaggtgca tattcaaggc ccgttgatgg atgaactttt gtagttgtgg tccaaaggtg tacgtatgtg ggacgggcat aaaaaatatg attttgatct 120 acgtgctttg ttattggcga acaggcgagt gagtgaagag agaagccatg cctctttcgt 180 gtgaggcaag cgatgaacga gtagatgctg ccattcaaca agggattcag ggtctgcacc 240 tattgtttag atgagatcgg tatcttgtat ctacatcatt gtagagaagt tatttacatg 300 ggccatcgtc gatttcttgt aaacaccaaa taagaagaaa aggcaagcat tgaaatgcac 360 aagtagacca tcgtgccaaa gcctattccc caaaggagca accttgtatt ccagatggta 420 tagaacttaa atgtagtgta tgggaatcg
- (2) INFORMATION FOR SEQ ID NO:509:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 33 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..33
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482364
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

Met Asn Phe Cys Ser Cys Gly Pro Lys Val Tyr Val Cys Gly Thr Gly

1 5 10 15

Ile Lys Asn Met Ile Leu Ile Tyr Val Leu Cys Tyr Trp Arg Thr Gly
20 25 30

- Glu
- (2) INFORMATION FOR SEQ ID NO:510:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 32 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..32

(D) OTHER INFORMATION: / Ceres Seq. ID 1482365 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:510: Met Trp Asp Gly His Lys Lys Tyr Asp Phe Asp Leu Arg Ala Leu Leu 10 Leu Ala Asn Arg Arg Val Ser Glu Glu Arg Ser His Ala Ser Phe Val 25

(2) INFORMATION FOR SEQ ID NO:511:

20

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 42 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..42
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482366
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

Met Leu Pro Phe Asn Lys Gly Phe Arg Val Cys Thr Tyr Cys Leu Asp 10

Glu Ile Gly Ile Leu Tyr Leu His His Cys Arg Glu Val Ile Tyr Met 25 20

Gly His Arg Arg Phe Leu Val Asn Thr Lys 35

- (2) INFORMATION FOR SEQ ID NO:512:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 757 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..757
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482371
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:512: 60 tgattggttt gatgaacagc tagagaacta cttagatgat gattatcttg tgtttgattg ccctggccag attgaactct tcacacatgt tccagttctg cggaactttg tcgagcacct 120 gaaacgaaaa aatttcaacg tttgcgctgt ttaccttctt gattcacagt ttgtcagcga 180 tgtaacaaaa tacatcagtg gttgcatggc ttctctatct gctatgattc agcttgaact 240 tecteatate aacateettt caaagatgga tetggtetee aacaaaaaag atgtagaaga 300 gtacctggac ccgaatgcac aggttcttct ttcacagctg aatcggcaga tggcacctcg 360 gtttggcaag ttgaacaagt gtttagctga actggttgat gattacagca tggttaattt 420 cattccactt gatttgagaa aggaaagcag catacaatat gtgctatctt ctatcgacac 480 540 ctgtatccag tatggggaag atgcagatgt gaaggtcagg gacttcgaag aagacgaaga 600 ctaaccactg gcactggatg ctgtaggagg tgcaaactgg ttgctagcag tcgtgtagtg cggagtgaga ctttgggact gtgtakggtg gcgcaggcat gcaaaaacgt cgtaggatgc 660 720 tgatgacage tawetggeet atgtaagacg aactaawgea gatatttgge aagteetagt aaaatgtgtg wgcrccttga tggtmyctrw tctcccc
- (2) INFORMATION FOR SEQ ID NO:513:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 180 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

(A) NAME/KEY: peptide

(B) LOCATION: 1..180

(D) OTHER INFORMATION: / Ceres Seq. ID 1482372

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

Asp Trp Phe Asp Glu Gln Leu Glu Asn Tyr Leu Asp Asp Asp Tyr Leu 1 5 10 15

Val Phe Asp Cys Pro Gly Gln Ile Glu Leu Phe Thr His Val Pro Val 20 25 30

Leu Arg Asn Phe Val Glu His Leu Lys Arg Lys Asn Phe Asn Val Cys 35 40 45

Ala Val Tyr Leu Leu Asp Ser Gln Phe Val Ser Asp Val Thr Lys Tyr 50 55 60

Ile Ser Gly Cys Met Ala Ser Leu Ser Ala Met Ile Gln Leu Glu Leu 65 70 75 80

Pro His Ile Asn Ile Leu Ser Lys Met Asp Leu Val Ser Asn Lys Lys 85 90 95

Asp Val Glu Glu Tyr Leu Asp Pro Asn Ala Gln Val Leu Leu Ser Gln

Leu Asn Arg Gln Met Ala Pro Arg Phe Gly Lys Leu Asn Lys Cys Leu

Ala Glu Leu Val Asp Asp Tyr Ser Met Val Asn Phe Ile Pro Leu Asp

Leu Arg Lys Glu Ser Ser Ile Gln Tyr Val Leu Ser Ser Ile Asp Thr

Cys Ile Gln Tyr Gly Glu Asp Ala Asp Val Lys Val Arg Asp Phe Glu 165 170 175

Glu Asp Glu Asp

180

(2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 112 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..112
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482373
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

Met Ala Ser Leu Ser Ala Met Ile Gln Leu Glu Leu Pro His Ile Asn

Ile Leu Ser Lys Met Asp Leu Val Ser Asn Lys Lys Asp Val Glu Glu 20 25 30

Tyr Leu Asp Pro Asn Ala Gln Val Leu Leu Ser Gln Leu Asn Arg Gln

Met Ala Pro Arg Phe Gly Lys Leu Asn Lys Cys Leu Ala Glu Leu Val

Asp Asp Tyr Ser Met Val Asn Phe Ile Pro Leu Asp Leu Arg Lys Glu
70 75 80

Ser Ser Ile Gln Tyr Val Leu Ser Ser Ile Asp Thr Cys Ile Gln Tyr 85 90 95

Gly Glu Asp Ala Asp Val Lys Val Arg Asp Phe Glu Glu Asp Glu Asp 100 105 110

- (2) INFORMATION FOR SEQ ID NO:515:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 106 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..106
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482374
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

Met Ile Gln Leu Glu Leu Pro His Ile Asn Ile Leu Ser Lys Met Asp 1 5 10 15

Leu Val Ser Asn Lys Lys Asp Val Glu Glu Tyr Leu Asp Pro Asn Ala 20 25 30

Gln Val Leu Leu Ser Gln Leu Asn Arg Gln Met Ala Pro Arg Phe Gly 35 40 45

Lys Leu Asn Lys Cys Leu Ala Glu Leu Val Asp Asp Tyr Ser Met Val 50 55 60

Asn Phe Ile Pro Leu Asp Leu Arg Lys Glu Ser Ser Ile Gln Tyr Val 65 70 75 75 80 Leu Ser Ser Ile Asp Thr Cys Ile Gln Tyr Gly Glu Asp Ala Asp Val

105

85 90 Lys Val Arg Asp Phe Glu Glu Asp Glu Asp

(2) INFORMATION FOR SEQ ID NO:516:

100

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 617 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..617
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482375
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:516: 60 agaatccccc gtmgacgcgc acggcagagc tccgcatccg caccggccgc cggcggstgg 120 atggggaagc tctccgccct gaagcgggaa gcggtcggag tggactaggc gctcggtgac 180 ttcctagttt agaagcggta rgtggaggcg atgcggggcg gggcgatgaa ggccctgcgg 240 cgatccagca cctcctcggc gccatcgcca agggtgccgt cttccccgcg gtcttattcg tggatccacc gccggtcgct tctcgttacc tygccggcct cgccggmgmc gtcctctgtg 300 tctgaatcgg cgaatttgcc cgcggagggt tcggattcag cgccagcktc agtggtggca 360 gcttcctcgt cgccctcgct ggctgcttcg tctccgaaca tggaatggtg gggctatcct 420 gtccggattt ctcctcgtgc tgcatgggtc gcttcaaaat ggggaataat tgttgggcta 480 cttgatattt cccaacaacg attcgcgcac ttattcccaa aattatgctg ttctggtagc 540 acagtggaag tggtagtttg ttcggtacta ttattcttat aagatttgct ttagtctctt 600 agattaaaaa aaaqctq
- (2) INFORMATION FOR SEQ ID NO:517:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 143 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..143
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482376
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:
- Met Arg Gly Gly Ala Met Lys Ala Leu Arg Arg Ser Ser Thr Ser Ser

10 Ala Pro Ser Pro Arg Val Pro Ser Ser Pro Arg Ser Tyr Ser Trp Ile 25 His Arg Arg Ser Leu Leu Val Thr Xaa Pro Ala Ser Pro Xaa Xaa Ser 40 Ser Val Ser Glu Ser Ala Asn Leu Pro Ala Glu Gly Ser Asp Ser Ala 55 Pro Xaa Ser Val Val Ala Ala Ser Ser Ser Pro Ser Leu Ala Ala Ser 75 70 Ser Pro Asn Met Glu Trp Trp Gly Tyr Pro Val Arg Ile Ser Pro Arg 90 Ala Ala Trp Val Ala Ser Lys Trp Gly Ile Ile Val Gly Leu Leu Asp 105 100 Ile Ser Gln Gln Arg Phe Ala His Leu Phe Pro Lys Leu Cys Cys Ser 120 Gly Ser Thr Val Glu Val Val Cys Ser Val Leu Leu Phe Leu 135 (2) INFORMATION FOR SEQ ID NO:518:

- - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 138 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..138
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482377
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:
- Met Lys Ala Leu Arg Arg Ser Ser Thr Ser Ser Ala Pro Ser Pro Arg 10
- Val Pro Ser Ser Pro Arg Ser Tyr Ser Trp Ile His Arg Arg Ser Leu 25
- Leu Val Thr Xaa Pro Ala Ser Pro Xaa Xaa Ser Ser Val Ser Glu Ser 40
- Ala Asn Leu Pro Ala Glu Gly Ser Asp Ser Ala Pro Xaa Ser Val Val 55
- Ala Ala Ser Ser Ser Pro Ser Leu Ala Ala Ser Ser Pro Asn Met Glu 70 75
- Trp Trp Gly Tyr Pro Val Arg Ile Ser Pro Arg Ala Ala Trp Val Ala 90 85
- Ser Lys Trp Gly Ile Ile Val Gly Leu Leu Asp Ile Ser Gln Gln Arg 105 110
- Phe Ala His Leu Phe Pro Lys Leu Cys Cys Ser Gly Ser Thr Val Glu 120
- Val Val Val Cys Ser Val Leu Leu Phe Leu 135
- (2) INFORMATION FOR SEQ ID NO:519:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 585 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..585
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482378
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

aattcattac cggaagagaa aaaaataact cggaaaagaa ggagacgccg aaaattcgaa 60 120 ggccccgagc aagatcgaat ccatgaggaa gtgggtcgtc gagcacaagc tccgagccgt 180 aggttgcctc tggctaggtg ggatcagcag ttcgatcgcc tacaactggt cgcggcccaa 240 tatgaagcct agcgtcaaga tcatccacgc aaggttgcat gctcaagctc taaccctggc 300 tgcattagtt ggttctgcat gcgtggagta ctatgatcag aagtatggtt cttctgggcc 360 aaaggtggac aaatacacaa gccaatacct ggcccattcg cataaagatt aaaggtcgcc 420 atgttggttc ctgcatgccg gattaatttt gggctcatct cgggttgctc atgacccgcc 480 catggatgct ggatgtttat tctttttttg tcttcataat tacaaaatgg tggtgtactt 540 gccaggcaaa tgttaatgag ggtataatgc agatattgtc gtcgc

- (2) INFORMATION FOR SEQ ID NO:520:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 109 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..109
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482379
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

Met Ala Glu Asp Gln Gly Lys Ala Lys Gln Met Ala Glu Ala Pro Ser

1 10 15

Lys Ile Glu Ser Met Arg Lys Trp Val Val Glu His Lys Leu Arg Ala 20 25 30

Val Gly Cys Leu Trp Leu Gly Gly Ile Ser Ser Ser Ile Ala Tyr Asn 35 40 45

Trp Ser Arg Pro Asn Met Lys Pro Ser Val Lys Ile Ile His Ala Arg 50 55 60

Leu His Ala Gln Ala Leu Thr Leu Ala Ala Leu Val Gly Ser Ala Cys 65 70 75 80

Val Glu Tyr Tyr Asp Gln Lys Tyr Gly Ser Ser Gly Pro Lys Val Asp 85 90 95

Lys Tyr Thr Ser Gln Tyr Leu Ala His Ser His Lys Asp 100 105

- (2) INFORMATION FOR SEQ ID NO:521:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 99 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..99
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482380
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

Met Ala Glu Ala Pro Ser Lys Ile Glu Ser Met Arg Lys Trp Val Val
1 5 10 15

Glu His Lys Leu Arg Ala Val Gly Cys Leu Trp Leu Gly Gly Ile Ser 20 25 30

Ser Ser Ile Ala Tyr Asn Trp Ser Arg Pro Asn Met Lys Pro Ser Val

Lys Ile Ile His Ala Arg Leu His Ala Gln Ala Leu Thr Leu Ala Ala 50 55 60

Leu Val Gly Ser Ala Cys Val Glu Tyr Tyr Asp Gln Lys Tyr Gly Ser 65 70 75 80
Ser Gly Pro Lys Val Asp Lys Tyr Thr Ser Gln Tyr Leu Ala His Ser

His Lys Asp

- (2) INFORMATION FOR SEQ ID NO:522:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 89 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..89
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482381
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

Met Arg Lys Trp Val Val Glu His Lys Leu Arg Ala Val Gly Cys Leu 1 5 10 15

Trp Leu Gly Gly Ile Ser Ser Ser Ile Ala Tyr Asn Trp Ser Arg Pro
20 25 30

Asn Met Lys Pro Ser Val Lys Ile Ile His Ala Arg Leu His Ala Gln 40 45

Ala Leu Thr Leu Ala Ala Leu Val Gly Ser Ala Cys Val Glu Tyr Tyr 50 60

Asp Gln Lys Tyr Gly Ser Ser Gly Pro Lys Val Asp Lys Tyr Thr Ser 65 70 75 80

Gln Tyr Leu Ala His Ser His Lys Asp 85

- (2) INFORMATION FOR SEQ ID NO:523:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 769 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..769
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482382
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

caaaaaaaac caatcggacg gaaacgaaaa aggcctcact catctccgtc cgtccgccgc 60 accytcyccy agcyccyctc cycyccygag acytcctytt tttttyccyc ctacyaycyc 120 tgtccctctt ttctttccgc ggttctgccc caacttctgc atccgaatct cccacgaagt 180 tgtcacggcg atggcagcga ccggcggcgt ttcaactgac gatatcccga tcctgcaagc 240 agagaacctc accagcaacg tcaagtccgt ccactacagt cgaacattct tgtcgatcat 300 tggtggagtt gttgctggaa tctggggatt cacaggcttg acgggatttg tcttctactt 360 tctgataatg atggttgcat ctatcgggct cttagcaaag tcaaagtttt cagtgcagac 420 atacttcgat agttggacca ggatttcaat tgaaggagtt tttggtggcc ttatgtcatt 480 cgtgctgttc tggacatttg cttatgacat tgttcatatc ttctgatgga cgtagaaaga 540 gctaccctcc aaagaaaata tggaatttca tctgatgtcg aacattccca atgggctctt 600 tgtacactca gtttttattt tggtaattgt tgatataata ttttgtgata ctatatcgtt 660 720 ggacctaagc agagctcata aactgatgta gcaactcctt cgcttggatg atctgtagca gttgtgattt gtcatttcca gtaatgaatg taaactttga ttgatggac

- (2) INFORMATION FOR SEQ ID NO:524:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 174 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..174
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482383
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:
- Lys Lys Asn Gln Ser Asp Gly Asn Glu Lys Gly Leu Thr His Leu Arg
  1 5 10 15
- Pro Ser Ala Ala Pro Ser Pro Ser Ala Ala Pro Arg Arg Arg Pro
  20 25 30
- Val Phe Leu Pro Pro Thr Ser Ala Val Pro Leu Phe Phe Pro Arg Phe 35 40 45
- Cys Pro Asn Phe Cys Ile Arg Ile Ser His Glu Val Val Thr Ala Met
- Glu Asn Leu Thr Ser Asn Val Lys Ser Val His Tyr Ser Arg Thr Phe
  85 90 95
- Leu Ser Ile Ile Gly Gly Val Val Ala Gly Ile Trp Gly Phe Thr Gly
  100 105 110
- Leu Thr Gly Phe Val Phe Tyr Phe Leu Ile Met Met Val Ala Ser Ile
  115 120 125
- Gly Leu Leu Ala Lys Ser Lys Phe Ser Val Gln Thr Tyr Phe Asp Ser
- Trp Thr Arg Ile Ser Ile Glu Gly Val Phe Gly Gly Leu Met Ser Phe 145 150 155 160
- Val Leu Phe Trp Thr Phe Ala Tyr Asp Ile Val His Ile Phe 165 170
- (2) INFORMATION FOR SEQ ID NO:525:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 112 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..112
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482384
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:
- Lys Lys Thr Asn Arg Thr Glu Thr Lys Lys Ala Ser Leu Ile Ser Val 1 5 10 15
- Arg Pro Pro His Arg Arg Arg Ala Pro Leu Arg Ala Gly Asp Val Leu 20 25 30
- Phe Phe Cys Arg Leu Arg Ala Leu Ser Leu Phe Ser Phe Arg Gly Ser 35 40 45
- Ala Pro Thr Ser Ala Ser Glu Ser Pro Thr Lys Leu Ser Arg Arg Trp 50 55 60
- Gln Arg Pro Ala Ala Phe Gln Leu Thr Ile Ser Arg Ser Cys Lys Gln 65 70 75 80
- Arg Thr Ser Pro Ala Thr Ser Ser Pro Ser Thr Thr Val Glu His Ser 85 90 95
- Cys Arg Ser Leu Val Glu Leu Leu Glu Ser Gly Asp Ser Gln Ala 100 105 110
- (2) INFORMATION FOR SEQ ID NO:526:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 111 amino acids
    - (B) TYPE: amino acid

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- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..111
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482385
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:
- Met Ala Ala Thr Gly Gly Val Ser Thr Asp Asp Ile Pro Ile Leu Gln
  1 10 15

Ala Glu Asn Leu Thr Ser Asn Val Lys Ser Val His Tyr Ser Arg Thr 20 25 30

Phe Leu Ser Ile Ile Gly Gly Val Val Ala Gly Ile Trp Gly Phe Thr 35 40 45

Gly Leu Thr Gly Phe Val Phe Tyr Phe Leu Ile Met Met Val Ala Ser 50 60

Ile Gly Leu Leu Ala Lys Ser Lys Phe Ser Val Gln Thr Tyr Phe Asp 65 70 75 80

Ser Trp Thr Arg Ile Ser Ile Glu Gly Val Phe Gly Gly Leu Met Ser 85 90 95

Phe Val Leu Phe Trp Thr Phe Ala Tyr Asp Ile Val His Ile Phe 100 105 110

- (2) INFORMATION FOR SEQ ID NO:527:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 767 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..767
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482386
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:527: agtcagacat agagaatcet tetagacaca gegatgtgee ggtgeeceag caattcattg tggcattteg caccacate aacceettea cacacgaace agatcagaaa agecactact

180 getttetete teteteteac acacacacag acacaaataa aagaaateag tagttegatt totoctotoa cotttattta cacatatoto tgtatttaca aattaggttg ttgatgtagg 240 ctgtacgcac ctgctagttt gctactcgat cctatatatc gtccaatcct atctgacctc 300 togacatoty groottgatt actogroott trigottggt tatatogroop cocoggoogc 360 420 ttgagctagc ttcctctagt tctcgcgctc gtcgtcgatc ggttgtttgc atagcccacg gcgagccgaa ggaataatgt cgtcggcgcc cctgcagatc gcgccggtgc cgggagcatg 480 tgtgctacgt gcactgcaac ttctgcaaca caattctcgc ggtaaacacc ctcatctctc 540 tgtttgtccc cctcctcct ttgaattccc agttctcgat cggcatgcat gcctctgaag 600 tgcagatcta caaaggggag atgcacatga aatgattgst gcgcgcgcgc atgcatcata 660 cagtttattt tgtaggattt ggctgtcccc tcttgctgga tttcttcttc ttcttctta 720

- tttttttgct ctataaattg ttttgtaaag gttgaatgaa atttctg (2) INFORMATION FOR SEQ ID NO:528:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 56 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..56
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482387
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

Ser Asp Ile Glu Asn Pro Ser Arg His Ser Asp Val Pro Val Pro Gln

1 10 15

Gln Phe Ile Val Ala Phe Arg Thr His Ile Asn Pro Phe Thr His Glu

Gln Phe Ile Val Ala Phe Arg Thr His Ile Asn Pro Phe Thr His Glu 20 25 30

Pro Asp Gln Lys Ser His Tyr Cys Phe Leu Ser Leu Ser His Thr His 35 40 45

Thr Asp Thr Asn Lys Arg Asn Gln 50 55

- (2) INFORMATION FOR SEQ ID NO:529:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 66 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..66
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482388
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

Met Cys Arg Cys Pro Ser Asn Ser Leu Trp His Phe Ala Pro Thr Ser

Thr Pro Ser His Thr Asn Gln Ile Arg Lys Ala Thr Thr Ala Phe Ser 20 25 30

Leu Ser Leu Thr His Thr Gln Thr Gln Ile Lys Glu Ile Ser Ser Ser 35 40 45

Ile Ser Pro Leu Thr Phe Ile Tyr Thr Tyr Leu Cys Ile Tyr Lys Leu
50 60

Gly Cys

65

- (2) INFORMATION FOR SEQ ID NO:530:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 53 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..53
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482389

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

Met Ser Ser Ala Pro Leu Gln Ile Ala Pro Val Pro Gly Ala Cys Val 1 5 10 15

Leu Arg Ala Leu Gln Leu Leu Gln His Asn Ser Arg Gly Lys His Pro
20 25 30

His Leu Ser Val Cys Pro Pro Pro Ser Phe Glu Phe Pro Val Leu Asp 35 40 45

Arg His Ala Cys Leu

50

- (2) INFORMATION FOR SEQ ID NO:531:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1023 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -

ttc

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- (B) LOCATION: 1..1023
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482398
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:531: atttgcctat ttccggtgca ggcagtctgg cagagcgagc aggcarrcaa ctgggccaga 60 120 rtcagacagg cctgcccgcc acgccgtccc gacggccatg gcccgaccct tctcttcccc 180 acacatcccg tottcatcct gggtgactcg ccgccctcct ccctggacct cctcaccgtc 240 cgtctccacc acgagaacta gcgcctcgtc tattaccgcg tgcagaccgc gccgcagggc 300 agtogogog goggootoco tocacotogg coogggggag atogoogago togogogoaa 360 caaggttttr attgcggcga cagtrgcgag cgcgatcggg cagctgtcca agcccttcac ctcggtcaag aatgggggcg tcggcgccgg ccttgacctc aggaccgtct tccgctccgg 420 agggatgccc tccayycact ccgcgagtgt tgttgcagtt gctacttcgc ttgggctaga 480 aagggggttt rcagactcca tatttggaat gtcagtrgwg tttkcagcaa ttgtaatgta 540 tgatgctcag ggagtaagaa gagaaktggg caaccacgcc aagatcttga acaggttttg 600 gatcctcaaa gagaaggtac ctctggagta ttctgaagtg gacatggcag ctcctgggtt 660 tgtttcggtc accgaggaag cgagctccaa cgcgagcccc tccttgaagc gcggttctag 720 780 caccgaatca ccaagggtga atgggctccg tgggtcagag cctgagctga cagagctgaa 840 gcaggcttgc gtagaggagg attaccggtt gagtgaatct gttggccaca cggagcttca ggtcacagtc ggcgccctgt tgggttttgc tgtaagctta gcagtgtatg caacactgta 900 acggaccttt tcatatcacg tccttgattg attacacatt tacacttttt tttacacaga 960 aacaatacat gcggtttatt gttcccaccg tttaaatcag aaatgcctat gctagctcgt 1020
- (2) INFORMATION FOR SEQ ID NO:532:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 299 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..299
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482399
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:532: Phe Ala Tyr Phe Arg Cys Arg Gln Ser Gly Arg Ala Ser Arg Xaa Xaa 10 Thr Gly Pro Xaa Ser Asp Arg Pro Ala Arg His Ala Val Pro Thr Ala 25 Met Ala Arg Pro Phe Ser Ser Pro His Ile Pro Ser Ser Ser Trp Val 40 Thr Arg Arg Pro Pro Pro Trp Thr Ser Ser Pro Ser Val Ser Thr Thr 55 Arg Thr Ser Ala Ser Ser Ile Thr Ala Cys Arg Pro Arg Arg Ala 75 70 Val Ala Pro Ala Ala Ser Leu His Leu Gly Pro Gly Glu Ile Ala Glu 90 Leu Ala Arg Asn Lys Val Xaa Ile Ala Ala Thr Xaa Ala Ser Ala Ile 100 105 Gly Gln Leu Ser Lys Pro Phe Thr Ser Val Lys Asn Gly Gly Val Gly 125 120 Ala Gly Leu Asp Leu Arg Thr Val Phe Arg Ser Gly Gly Met Pro Ser 140 135 Xaa His Ser Ala Ser Val Val Ala Val Ala Thr Ser Leu Gly Leu Glu 155 150 Arg Gly Phe Xaa Asp Ser Ile Phe Gly Met Ser Xaa Xaa Phe Xaa Ala 170 165 Ile Val Met Tyr Asp Ala Gln Gly Val Arg Arg Glu Xaa Gly Asn His 190 185 Ala Lys Ile Leu Asn Arg Phe Trp Ile Leu Lys Glu Lys Val Pro Leu 205 200

Glu Tyr Ser Glu Val Asp Met Ala Ala Pro Gly Phe Val Ser Val Thr 210 215 220 Glu Glu Ala Ser Ser Asn Ala Ser Pro Ser Leu Lys Arg Gly Ser Ser

225 230 235 240

Thr Glu Ser Pro Arg Val Asn Gly Leu Arg Gly Ser Glu Pro Glu Leu
245
250
255
Thu Glu Leu Arg Lou Ser Glu Arg Lou Ser Glu

Thr Glu Leu Lys Gln Ala Cys Val Glu Glu Asp Tyr Arg Leu Ser Glu 260 265 270

Ser Val Gly His Thr Glu Leu Gln Val Thr Val Gly Ala Leu Leu Gly 275 280 285

Phe Ala Val Ser Leu Ala Val Tyr Ala Thr Leu 290 295

- (2) INFORMATION FOR SEQ ID NO:533:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 267 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..267
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482400
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

Met Ala Arg Pro Phe Ser Ser Pro His Ile Pro Ser Ser Trp Val 1 5 10 15

Thr Arg Arg Pro Pro Pro Trp Thr Ser Ser Pro Ser Val Ser Thr Thr
20 25 30

Arg Thr Ser Ala Ser Ser Ile Thr Ala Cys Arg Pro Arg Arg Ala

Val Ala Pro Ala Ala Ser Leu His Leu Gly Pro Gly Glu Ile Ala Glu

50 55 60
Leu Ala Arg Asn Lys Val Xaa Ile Ala Ala Thr Xaa Ala Ser Ala Ile
65 70 75 80

65 70 75 80
Gly Gln Leu Ser Lys Pro Phe Thr Ser Val Lys Asn Gly Gly Val Gly

85 90 95 Ala Gly Leu Asp Leu Arg Thr Val Phe Arg Ser Gly Gly Met Pro Ser

100 105 110 Xaa His Ser Ala Ser Val Val Ala Val Ala Thr Ser Leu Gly Leu Glu

115 120 125

Arg Gly Phe Xaa Asp Ser Ile Phe Gly Met Ser Xaa Xaa Phe Xaa Ala
130 135 140

130 135 140

Ile Val Met Tyr Asp Ala Gln Gly Val Arg Arg Glu Xaa Gly Asn His

145 150 155 160

Ala Lys Ile Leu Asn Arg Phe Trp Ile Leu Lys Glu Lys Val Pro Leu

165
170
175

Glu Tyr Ser Glu Val Asp Met Ala Ala Pro Gly Phe Val Ser Val Thr 180 185 190 Glu Glu Ala Ser Ser Asn Ala Ser Pro Ser Leu Lys Arg Gly Ser Ser

195 200 205

The Clu Ser Bro Arg Val Ash Gly Leu Arg Gly Ser Glu Pro Glu Leu

Thr Glu Ser Pro Arg Val Asn Gly Leu Arg Gly Ser Glu Pro Glu Leu 210 215 220

Thr Glu Leu Lys Gln Ala Cys Val Glu Glu Asp Tyr Arg Leu Ser Glu 225 230 235 240

Ser Val Gly His Thr Glu Leu Gln Val Thr Val Gly Ala Leu Leu Gly
245 250 255

Phe Ala Val Ser Leu Ala Val Tyr Ala Thr Leu 260 265

(2) INFORMATION FOR SEQ ID NO:534:

- (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 158 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..158
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482401
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:534: Met Pro Ser Xaa His Ser Ala Ser Val Val Ala Val Ala Thr Ser Leu 10 Gly Leu Glu Arg Gly Phe Xaa Asp Ser Ile Phe Gly Met Ser Xaa Xaa 25 Phe Xaa Ala Ile Val Met Tyr Asp Ala Gln Gly Val Arg Arg Glu Xaa Gly Asn His Ala Lys Ile Leu Asn Arg Phe Trp Ile Leu Lys Glu Lys Val Pro Leu Glu Tyr Ser Glu Val Asp Met Ala Ala Pro Gly Phe Val 75 Ser Val Thr Glu Glu Ala Ser Ser Asn Ala Ser Pro Ser Leu Lys Arg 90 Gly Ser Ser Thr Glu Ser Pro Arg Val Asn Gly Leu Arg Gly Ser Glu 105 100 Pro Glu Leu Thr Glu Leu Lys Gln Ala Cys Val Glu Glu Asp Tyr Arg 125 120 Leu Ser Glu Ser Val Gly His Thr Glu Leu Gln Val Thr Val Gly Ala 140
- 150 (2) INFORMATION FOR SEQ ID NO:535:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 524 base pairs

135 Leu Leu Gly Phe Ala Val Ser Leu Ala Val Tyr Ala Thr Leu

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..524
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482402
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:535: 60 ttccggctcc gctcagtcag gcctcagatc ggtcgaatcc agcaccccct ccagatttgc gtcaccaatc ttcttcttct tccgccgccg ccgccgctcc cccacaagga ggttagctgc 120 tatccccaaa tcgattcatc aatcatccgt gtccttccat ttcattccag tcggtcgccg 180 240 cagcacggac cgagaacaga gcatcacgtc acatcaaact aacctaacca gcctcgtccc tegetgegta tetgetgeac tttcatcaac accagtettt etecteetgg attgeattge 300 360 gatgggcctc aaggagcagc agctagacgc cactgaccaa actcgtgatg ccgccaactc 420 cctcgcttct gtttctgacg agcaccacga gggaccccgt gtctcaagct gcagcaccga 480 caaggattct ggccttccaa gttgccgagt ctgccattgc gtgg

155

- (2) INFORMATION FOR SEQ ID NO:536:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 174 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide

#### (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..174
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482403
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:
- Ser Gly Ser Ala Gln Ser Gly Leu Arg Ser Val Glu Ser Ser Thr Pro 1 5 10 15
- Ser Pro Thr Arg Arg Leu Ala Ala Ile Pro Lys Ser Ile His Gln Ser 35 40 45
- Ser Val Ser Phe His Phe Ile Pro Val Gly Arg Arg Ser Thr Asp Arg 50 55 60
- Glu Gln Ser Ile Thr Ser His Gln Thr Asn Leu Thr Ser Leu Val Pro 70 75 80
- Arg Cys Val Ser Ala Ala Leu Ser Ser Thr Pro Val Phe Leu Leu 85 90 95
- Asp Cys Ile Ala Gln Ala Arg Glu Arg Thr His Thr Asp Arg Asn Ser
- His Asp Leu Leu Ile Gln Ser Lys Met Gly Leu Lys Glu Gln Gln Leu 115 120 125
- Asp Ala Thr Asp Gln Thr Arg Asp Ala Ala Asn Ser Leu Ala Ser Val 130 140
- Ser Asp Glu His His Glu Gly Pro Arg Val Ser Ser Cys Ser Thr Asp 145 150 155 160
- Lys Asp Ser Gly Leu Pro Ser Cys Arg Val Cys His Cys Val 165 170
- (2) INFORMATION FOR SEQ ID NO:537:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 451 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..451
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482404
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:
- (2) INFORMATION FOR SEQ ID NO:538:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 38 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..38
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482405
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

60

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Val Asp Asp Trp Arg Gly Gly Asp Thr Leu Val Thr Leu Pro Gly Arg 10 Pro Ser Ser Arg Ala Ser Ala Trp Ser Arg Phe Cys Leu Cys Thr Pro 25 20

Pro Pro Pro Val His Ala 35

- (2) INFORMATION FOR SEQ ID NO:539:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 56 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..56
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482406
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

Trp Thr Thr Gly Ala Val Val Ile Arg Leu Leu Ser Gln Val Ala

Arg Arg Val Glu Leu Leu Arg Gly Val Ala Ser Ala Ser Ala His Arg 25 30 2.0

His Arg Arg Cys Thr His Asp Val His Ala Arg Arg Ser Trp Pro Arg 45 40 35

Pro Arg Leu Ala His Pro Arg Ile 55 50

- (2) INFORMATION FOR SEQ ID NO:540:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 40 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..40
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482407
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

Met Lys Ser Ser Arg Gly Lys Leu Lys Leu Thr Glu Tyr Asn Ala Pro 10

Cys Gly Tyr Phe Arg Asn Gln Asp Ile Asn Cys Ala Ser Ser Cys 25 20

Val Pro Gly Gly Asn Arg Lys Ser 35

(2) INFORMATION FOR SEQ ID NO:541:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 553 base pairs
  - (B) TYPE: nucleic acid (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..553
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482408
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

120 acaacaccgc cgccaggagt gttcaccggg gggaaatgat ggcgggagca ttgccaaggt ctcgccgtgc ttctccggct gcaggatggg tccgccgtgg agcatggaca gcctcgtaag 180

| caccgtgtga<br>gctacctgcg<br>agaaaaagag<br>ttgattttct<br>atctgtgatc | cgaggatcta | caccatcacg<br>gctatacccg<br>agagactagg<br>catgtgtgca | aggaagaaga<br>tgaccgcttt<br>tacctgtgcg | atagtggtcgg<br>atagtgccag<br>ggctcggtca<br>caatagaatg | ccaatgatct | 240<br>300<br>360<br>420<br>480<br>540 |
|--|------------|--|--|---|------------|--|
| ccatccgtgc   | gtg        |  | _                                      |   |            |  |

- (2) INFORMATION FOR SEQ ID NO:542:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 32 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..32
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482409
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:542: Lys Asp Glu Gly Asn Leu Ile Ser Thr Gly Arg Arg Asp Glu Arg Glu 10 5

Arg Thr Gly Glu Thr Thr Pro Pro Gly Val Phe Thr Gly Gly Lys 20

- (2) INFORMATION FOR SEQ ID NO:543:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 30 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..30
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482410
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

Met Cys Ala Tyr Leu Cys Ala Ile Glu Cys Glu Pro Leu Ile Cys Asp 10 5 Pro Arg Ile Tyr Arg Ser Tyr Arg Leu Val Thr Leu Glu Ile

- 25 20
- (2) INFORMATION FOR SEQ ID NO:544:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 809 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..809
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482411
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

aagtgcatta attagtgccc actgcagtag ctactagcta gcacagttca tcgacctcgc 60 tegtggeegg caageaateg etcaagetaa gecatggege etcgeageeg eetectegae 120 ctggagaggc acgacgtgct cttcttctac ggcgatggtg cctaccacca gagcgagagc 180 knegtegtee ttgtegtegt egtegeegee etgeteetee teetegtege geegeteeeg 240 cacgeegetg cegtetgegg ggegetetac gtegeetact getteeteet egacegegea 300 gcraagngcg agcageteca getegtegtg teettecaet gacaetgeeg egeegeegge 360

Phe His

ggcagacgcc tctcgccca ctactcgggg cacggtggca ggctatatga tcgtgcagaa 420 gcagaattga agtcgcaatg gtcagcatgc ttatattacc agttaccatg cttaattgca 480 tagttgcact gtagtgatca ccgcaggaag atggctctgt gtggaataga gtagtaggct 540 taagcacatt tcgtattaca ggaaaagagt ttgtggtcag aggtcttccc acgtatatag 600 ctgtctcttg agactctgca tggactctgc aatckggata tgcatgcact ataatcactt cgaaataggg ccacagttga caaatcagcc aggaaacata tgtaatctgg attctttca aggaatatat atgaatggac tgcacggttt 780

- tctttcagtc tgttgcctgt tcttcagcc (2) INFORMATION FOR SEQ ID NO:545:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 82 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..82
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482412
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

- (2) INFORMATION FOR SEQ ID NO:546:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 91 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..91
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482413
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

Met Val Pro Thr Thr Arg Ala Arg Xaa Xaa Ser Ser Leu Ser Ser Ser 1 15

Ser Pro Pro Cys Ser Ser Ser Ser Ser Arg Arg Ser Arg Thr Pro Leu 20 25 30

Pro Ser Ala Gly Arg Ser Thr Ser Pro Thr Ala Ser Ser Ser Thr Ala
35
40
45
45
Thr Asp Thr

Gln Xaa Xaa Ala Ser Ser Ser Ser Ser Ser Cys Pro Ser Thr Asp Thr 50 55 60

Ala Ala Pro Pro Ala Ala Asp Ala Ser Arg Pro Thr Thr Arg Gly Thr 65 70 75 80

- Val Ala Gly Tyr Met Ile Val Gln Lys Gln Asn 85 90
- (2) INFORMATION FOR SEQ ID NO:547:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 63 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..63
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482414
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

Met Asp Ser Ala Ile Xaa Ile Cys Met His Tyr Asn His Phe Glu Ile 1 5 10 15

Gly Pro Gln Leu Thr Asn Gln Pro Gly Asn Ile Cys Asn Leu Asp Ser 20 25 30

Phe Gln Lys Lys Ile Val Ile Arg Leu Leu Phe Ser Gly Ile Tyr Met 35 40 45

Asn Gly Leu His Gly Phe Leu Ser Val Cys Cys Leu Phe Phe Ser 50 55 60

- (2) INFORMATION FOR SEQ ID NO:548:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 871 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..871
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482415
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:548: atatatacgc acacgcggtg ggagtrggag ggggagactc tgccctgacc acagcaaaca 60 acctcctctt tcctttccat ccatcggacc atcgatcaca attttcatgg cggtcaagga 120 ctgcrgcggg cacaagggct gcgagtgcga gcgggagcgr ctgtaccggc ggtgctgcgc 180 ggcggtcgtg gctctgatcc tcctggtcct cttcatcgtg ctcgtcgtgt ggctggtgct 240 gcgccccac aagccccggt tctacctgca ggacctgtcg gtgctgtgcc tgaacgtgac 300 gccgccggst ccacgtacct gttcacgacg atgcaggcga cggtggcggc gcgcaacccg 360 aacgagcgcg tgggcgtgta ctacgaccag gcggacgcgt acgcggaggt acaagggcgt 420 ggcgatcacg gtgccgacgc ggctgcccgt gcagtaccag gggccccggg acgcgtccgt 480 gtggtccccg ttcctgcgcg ccccggaagg cggcgtgcag ytcccgccgc agctggccgt 540 ggcstggcgc aggacgagac ggcgggctac gtgcntstcg acgtccgcgt cgacggctgg 600 qtccqctqqa aqqtcggtac cagctggatc tcgggtcact accacctccg cgtcaactgc 660 cncgcgctgc tcaccgtcaa cgacggcagg ggcagctacg gcgccaacac cggcggcggc 720 accggatact teegetteea geaggeagsg catgegeegt agaegtetag cagtgetete 780 tetetetetg taccagetag etgtgtttge caattegteg ategaateaa aggaegatge 840 ttccttcgtc ggtgttcatc actcacgcac t
- (2) INFORMATION FOR SEQ ID NO:549:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 290 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..290
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482416
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:
- Tyr Ile Arg Thr Arg Gly Gly Ser Xaa Arg Gly Arg Leu Cys Pro Asp 1 5 10 15 His Ser Lys Gln Pro Pro Leu Ser Phe Pro Ser Ile Gly Pro Ser Ile

|            |            |            | 20         |            |            |            |            | 25         |            |            |            |            | 30         |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Thr        | Ile        | Phe<br>35  | Met        | Ala        | Val        | Lys        | Asp<br>40  | Cys        | Xaa        | Gly        | His        | Lys<br>45  | Gly        | Cys        | Glu        |
| Cys        | Glu<br>50  | Arg        | Glu        | Xaa        | Leu        | Tyr<br>55  | Arg        | Arg        | Cys        | Cys        | Ala<br>60  | Ala        | Val        | Val        | Ala        |
| Leu<br>65  | Ile        | Leu        | Leu        | Val        | Leu<br>70  | Phe        | Ile        | Val        | Leu        | Val<br>75  | Val        | Trp        | Leu        | Val        | Leu<br>80  |
| Arg        | Pro        | His        | Lys        | Pro<br>85  | Arg        | Phe        | Tyr        | Leu        | Gln<br>90  | Asp        | Leu        | Ser        | Val        | Leu<br>95  | Cys        |
| Leu        | Asn        | Val        | Thr<br>100 | Pro        | Pro        | Xaa        | Pro        | Arg<br>105 | Thr        | Cys        | Ser        | Arg        | Arg<br>110 | Cys        | Arg        |
| Arg        | Arg        | Trp<br>115 | Arg        | Arg        | Ala        | Thr        | Arg<br>120 | Thr        | Ser        | Ala        | Trp        | Ala<br>125 | Cys        | Thr        | Thr        |
| Thr        | Arg<br>130 | Arg        | Thr        | Arg        | Thr        | Arg<br>135 | Arg        | Tyr        | Lys        | Gly        | Val<br>140 | Ala        | Ile        | Thr        | Val        |
| Pro<br>145 | Thr        | Arg        | Leu        | Pro        | Val<br>150 | Gln        | Tyr        | Gln        | Gly        | Pro<br>155 | Arg        | Asp        | Ala        | Ser        | Val<br>160 |
| Trp        | Ser        | Pro        | Phe        | Leu<br>165 | Arg        | Ala        | Pro        | Glu        | Gly<br>170 | Gly        | Val        | Gln        | Xaa        | Pro<br>175 | Pro        |
| Gln        | Leu        | Ala        | Val<br>180 | Xaa        | Trp        | Arg        | Arg        | Thr<br>185 | Arg        | Arg        | Arg        | Ala        | Thr<br>190 | Cys        | Xaa        |
| Ser        | Thr        | Ser<br>195 | Ala        | Ser        | Thr        | Ala        | Gly<br>200 | Ser        | Ala        | Gly        | Arg        | Ser<br>205 | Val        | Pro        | Ala        |
| Gly        | Ser<br>210 | Arg        | Val        | Thr        | Thr        | Thr<br>215 | Ser        | Ala        | Ser        | Thr        | Ala<br>220 | Xaa        | Arg        | Cys        | Ser        |
| Pro<br>225 | Ser        | Thr        | Thr        | Ala        | Gly<br>230 | Ala        | Ala        | Thr        | Ala        | Pro<br>235 | Thr        | Pro        | Ala        | Ala        | Ala<br>240 |
|            | _          |            | Ser        | 245        |            |            |            |            | 250        |            |            |            |            | 255        |            |
|            |            |            | Ser<br>260 |            |            |            |            | 265        |            |            |            |            | 270        |            |            |
| Ser        | Ile        | Glu<br>275 | Ser        | Lys        | Asp        | Asp        | Ala<br>280 | Ser        | Phe        | Val        | Gly        | Val<br>285 | His        | His        | Ser        |
| Arg        | Thr<br>290 |            |            |            |            |            |            |            |            |            |            |            |            |            |            |

- (2) INFORMATION FOR SEQ ID NO:550:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 255 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..255
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482417
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:
- Met Ala Val Lys Asp Cys Xaa Gly His Lys Gly Cys Glu Cys Glu Arg
  1 5 10 15
- Glu Xaa Leu Tyr Arg Arg Cys Cys Ala Ala Val Val Ala Leu Ile Leu 20 25 30
- Leu Val Leu Phe Ile Val Leu Val Val Trp Leu Val Leu Arg Pro His 35 40 45
- Lys Pro Arg Phe Tyr Leu Gln Asp Leu Ser Val Leu Cys Leu Asn Val
- Thr Pro Pro Xaa Pro Arg Thr Cys Ser Arg Arg Cys Arg Arg Arg Trp 65 70 75 80
- Arg Arg Ala Thr Arg Thr Ser Ala Trp Ala Cys Thr Thr Thr Arg Arg 85 90 95

Thr Arg Thr Arg Arg Tyr Lys Gly Val Ala Ile Thr Val Pro Thr Arg 105 Leu Pro Val Gln Tyr Gln Gly Pro Arg Asp Ala Ser Val Trp Ser Pro 125 120 Phe Leu Arg Ala Pro Glu Gly Gly Val Gln Xaa Pro Pro Gln Leu Ala 135 140 Val Xaa Trp Arg Arg Thr Arg Arg Arg Ala Thr Cys Xaa Ser Thr Ser 155 150 Ala Ser Thr Ala Gly Ser Ala Gly Arg Ser Val Pro Ala Gly Ser Arg 170 165 Val Thr Thr Ser Ala Ser Thr Ala Xaa Arg Cys Ser Pro Ser Thr 180 185 Thr Ala Gly Ala Ala Thr Ala Pro Thr Pro Ala Ala Ala Pro Asp Thr 200 195 Ser Ala Ser Ser Arg Gln Xaa Met Arg Arg Arg Arg Leu Ala Val Leu

210 215 220

Ser Leu Ser Leu Tyr Gln Leu Ala Val Phe Ala Asn Ser Ser Ile Glu
225 230 235 240

Ser Lys Asp Asp Ala Ser Phe Val Gly Val His His Ser Arg Thr 245 250 255

- (2) INFORMATION FOR SEQ ID NO:551:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 725 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..725
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482418
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:551: aggaacttgt aacctggctc gcagcgttgc gtgaaggacc tcgcgcgcgc tctcctctac tgcttggtcg tctcgttgcc ccggccgaac atccaagcct ctccatgtct ggcccttcga 120 aggagcagcg cgncatgccg gcactggggt gctggctaat ggctgtcggc accttccgct 240 tggccttcac ctggtcgtgc ttcttcggct ccgggtygct ctgctcagcc acctactccg 300 agatacaggt gatcggcgtg catgggcgca cggttgcggt gtggacgctg ctgtcgtgca ccctctgctt cctgtgcgcc ttcaacctca ccagcanagc cgctgtacgc ggccaccttc ctgtccttcg tctacgcctt cgggtacctg agcaccgagt gcatggtgta ccacaccatg 420 agtgcagcta gtctcgtccc gttcaccttc atcgctgtca catccatggt ctggatgctg attcaatgga actcggatgg tcacggcccc cgtcttcttc atgggtctac tgcttccaag 540 cagecatgae ttegeaggtt eteteaceta tggetteett caactacata eggtteagtg 600 catgcaagca ccatggaatt atggaatatc tgtaatcttt tgtaataatc gtttctatgt 660 cccgcaggct agtgaatgaa actagcaagc tatcatctgt gataaatttg taattttacc 720 actct
- (2) INFORMATION FOR SEQ ID NO:552:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 142 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..142
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482419
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:
- Glu Leu Val Thr Trp Leu Ala Ala Leu Arg Glu Gly Pro Arg Ala Arg

Ser Pro Leu Leu Gly Arg Leu Val Ala Pro Ala Glu His Pro Ser 20 25 30

Leu Ser Met Ser Gly Pro Ser Lys Glu Gln Arg Xaa Met Pro Ala Leu 35 40 45

Gly Cys Trp Leu Met Ala Val Gly Thr Phe Arg Leu Ala Phe Thr Trp 50 55 60

Ser Cys Phe Phe Gly Ser Gly Xaa Leu Cys Ser Ala Thr Tyr Ser Glu 65 70 75 80

Ile Gln Val Ile Gly Val His Gly Arg Thr Val Ala Val Trp Thr Leu 85 90 95

Leu Ser Cys Thr Leu Cys Phe Leu Cys Ala Phe Asn Leu Thr Ser Xaa 100 105 110

Ala Ala Val Arg Gly His Leu Pro Val Leu Arg Leu Arg Leu Arg Val

Pro Glu His Arg Val His Gly Val Pro His His Glu Cys Ser 130 135 140

- (2) INFORMATION FOR SEQ ID NO:553:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 108 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..108
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482420
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

Met Ser Gly Pro Ser Lys Glu Gln Arg Xaa Met Pro Ala Leu Gly Cys 1 5 10 15

Trp Leu Met Ala Val Gly Thr Phe Arg Leu Ala Phe Thr Trp Ser Cys
20 25 30

Phe Phe Gly Ser Gly Xaa Leu Cys Ser Ala Thr Tyr Ser Glu Ile Gln 35 40 45

Val Ile Gly Val His Gly Arg Thr Val Ala Val Trp Thr Leu Leu Ser 50 55 60

Cys Thr Leu Cys Phe Leu Cys Ala Phe Asn Leu Thr Ser Xaa Ala Ala 65 70 75 80

Val Arg Gly His Leu Pro Val Leu Arg Leu Arg Leu Arg Val Pro Glu 85 90 95

His Arg Val His Gly Val Pro His His Glu Cys Ser 100 105

- (2) INFORMATION FOR SEQ ID NO:554:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 98 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..98
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482421
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

Met Pro Ala Leu Gly Cys Trp Leu Met Ala Val Gly Thr Phe Arg Leu
1 10 15

Ala Phe Thr Trp Ser Cys Phe Phe Gly Ser Gly Xaa Leu Cys Ser Ala 20 25 30

Thr Tyr Ser Glu Ile Gln Val Ile Gly Val His Gly Arg Thr Val Ala

- (2) INFORMATION FOR SEQ ID NO:555:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 119 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..119
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482422
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

  aaccgcaagc tcaagcaaaa acacaaagcg cttaaaccac actcaaacca accgccagcc 60
  aacaaacagg cctcctagtc ccgaccagaa ctcgctcgta gccccgagaa cccgacagc
- (2) INFORMATION FOR SEQ ID NO:556:
  - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 39 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..39
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482423
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:
  Thr Ala Ser Ser Ser Lys Asn Thr Lys Arg Leu Asn His Thr Gln Thr
  1 5 10 15

Asn Arg Gln Pro Thr Asn Arg Pro Pro Ser Pro Asp Gln Asn Ser Leu 20 25 30

Val Ala Pro Arg Thr Arg Gln

- (2) INFORMATION FOR SEQ ID NO:557:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 297 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..297
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482424
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

  atttttcgcc cgccgcccc agtcccgatc cgaagctgtg cctcgtacca tttcgatcca
  atggcgccga cgtcgaagct gtcgacggc atcaagcgcg cttcgcggtc gcacgcgtac
  catcgccgtg ggctgtgggc catgatgaac ttgagcgcaa gaagagtata ccgcttgtag
  ttactctgta acgtacgcag gcagagagcg cgcgttccag cgtatacgta cacgtagacg
  tagtacgtac atgtactacc cgttacttgc tctccaatcg agttgcagtt gcagccc

  (2) INFORMATION FOR SEQ ID NO:558:

i

- (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 59 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..59 (D) OTHER INFORMATION: / Ceres Seq. ID 1482425 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:558: Ile Phe Arg Pro Pro Pro Val Pro Ile Arg Ser Cys Ala Ser Tyr 10 His Phe Asp Pro Met Ala Pro Thr Ser Lys Leu Ser Thr Gly Ile Lys 25 20 Arg Ala Ser Arg Ser His Ala Tyr His Arg Arg Gly Leu Trp Ala Met 40 Met Asn Leu Ser Ala Arg Arg Val Tyr Arg Leu 55 (2) INFORMATION FOR SEQ ID NO:559: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 47 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..47 (D) OTHER INFORMATION: / Ceres Seq. ID 1482426 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:559: Phe Phe Ala Arg Arg Pro Gln Ser Arg Ser Glu Ala Val Pro Arg Thr 10 Ile Ser Ile Gln Trp Arg Arg Arg Ser Cys Arg Arg Ala Ser Ser 25 20 Ala Leu Arg Gly Arg Thr Arg Thr Ile Ala Val Gly Cys Gly Pro 40 (2) INFORMATION FOR SEQ ID NO:560: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 62 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..62 (D) OTHER INFORMATION: / Ceres Seq. ID 1482427 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:560: Phe Ser Pro Ala Ala Pro Ser Pro Asp Pro Tys Leu Cys Leu Val Pro 10 Phe Arg Ser Asn Gly Ala Asp Val Glu Ala Val Asp Gly His Gln Ala 25 Arg Phe Ala Val Ala Arg Val Pro Ser Pro Trp Ala Val Gly His Asp 40 Glu Leu Glu Arg Lys Lys Ser Ile Pro Leu Val Val Thr Leu
  - (2) INFORMATION FOR SEQ ID NO:561:
    - (i) SEQUENCE CHARACTERISTICS:

55

60

120

180 240

300

360

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- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..606
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482428
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:
  gtctcacaaa ctttttta gtctatcggt aacccgcttc agctagcgag cattgagcag
  tctgcagtcg ccgagccgcg tgtccgccgg gccggcggtt accaagctca ccaaaaatct
  ttccaggttc gaggccgccc atgttcgcct gcaggtctct cctcgcaagg gatcatattg
  tcgaaataag ttggcctcat tcgtgatgga aggggcgcaa ggatcaagca ttgtgacaaa
  acacaataaa aggcagtctc ctgtgcagag atggaggcca gtttcaacag aagcagttcc
  ccagcatcac caagatgaca ttattgagac atcaaattct ggaagcaaga aaattataga

ggattgcata gcttctagtg agaatttgcc accagatgga acaaccaatg ttgttgaagt 420 taccgccaat gatgcttcat cgtcaaaaaa taatttaagt tttgggtaca gttcaactaa 480 agtagttata gaagaccatg cggagttatc tggcttcaat aaggatctag ctgggtccaa tgtcttcggg acacattcct yctctgttga ggcggktcaa agtcgacagc ttgactactc 600

tcattt

- (2) INFORMATION FOR SEQ ID NO:562:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 133 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..133
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482429
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:
- Met Glu Gly Ala Gln Gly Ser Ser Ile Val Thr Lys His Asn Lys Arg 1 5 5 10 10 15 Gln Ser Pro Val Gln Arg Trp Arg Pro Val Ser Thr Glu Ala Val Pro
- Gln Ser Pro Val Gln Arg Trp Arg Pro Val Ser Thr Glu Ala Val Pro 20 25 30
- Gln His His Gln Asp Asp Ile Ile Glu Thr Ser Asn Ser Gly Ser Lys 35 40 45
- Lys Ile Ile Glu Asp Cys Ile Ala Ser Ser Glu Asn Leu Pro Pro Asp 50 55 60
- Gly Thr Thr Asn Val Val Glu Val Thr Ala Asn Asp Ala Ser Ser Ser 65 70 75 80
- Lys Asn Asn Leu Ser Phe Gly Tyr Ser Ser Thr Lys Val Val Ile Glu 85 90 95
- Asp His Ala Glu Leu Ser Gly Phe Asn Lys Asp Leu Ala Gly Ser Asn 100 105 110
- Val Phe Gly Thr His Ser Xaa Ser Val Glu Ala Xaa Gln Ser Arg Gln
  115 120 125

Leu Asp Tyr Ser His

130

- (2) INFORMATION FOR SEQ ID NO:563:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 451 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:

- (A) NAME/KEY: -
- (B) LOCATION: 1..451
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482430
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:563: gaaaacggcg atgttggccg tcccattttg taagctcccc ttccccgtct ggccgtctcg 60 actgccccag tcctttctca gatccatgtc tacccagaat ctgctaactg gcgcgtgcac 120 gageteegee eegaceegt eegaggegga ggaaggggae aggaegeett tggetgaege 180 tgcgaacgcg gcggaagagc tgtaccgcct ccgtgacacc tttttcccgc gggacccttc 240 cgagaaagtc gccgcactcc gcgcccgcgc cgacgccgcc ctcgcgctcc tcgacgcctt 300 cccgtccgaa caaaagaagt ctcgacaact gcgtggtgtt tatgaatttt tgaggggaaa 360 420 aatactggat gtctttcctg attatcataa ggaggctgaa gatcatttat ccaaagcagt aaagttgaac ccatctcttg tagatgcatg g
- (2) INFORMATION FOR SEQ ID NO:564:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 150 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..150
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482431
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:
- Lys Thr Ala Met Leu Ala Val Pro Phe Cys Lys Leu Pro Phe Pro Val
- Trp Pro Ser Arg Leu Pro Gln Ser Phe Leu Arg Ser Met Ser Thr Gln 20 25 30
- Asn Leu Leu Thr Gly Ala Cys Thr Ser Ser Ala Pro Thr Pro Ser Glu 35 40 45
- Ala Glu Glu Gly Asp Arg Thr Pro Leu Ala Asp Ala Ala Asn Ala Ala 50 55 60
- Glu Glu Leu Tyr Arg Leu Arg Asp Thr Phe Phe Pro Arg Asp Pro Ser 65 70 75 80
- Glu Lys Val Ala Ala Leu Arg Ala Arg Ala Asp Ala Ala Leu Ala Leu 85 90 95
- Leu Asp Ala Phe Pro Ser Glu Gln Lys Lys Ser Arg Gln Leu Arg Gly 100 105 110
- Val Tyr Glu Phe Leu Arg Gly Lys Ile Leu Asp Val Phe Pro Asp Tyr 115 120 125
- His Lys Glu Ala Glu Asp His Leu Ser Lys Ala Val Lys Leu Asn Pro 130 140
- Ser Leu Val Asp Ala Trp
- 145 150
- (2) INFORMATION FOR SEQ ID NO:565:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 147 amino acids
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS:
      - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..147
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482432
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:
- Met Leu Ala Val Pro Phe Cys Lys Leu Pro Phe Pro Val Trp Pro Ser 1 5 10 15
- Arg Leu Pro Gln Ser Phe Leu Arg Ser Met Ser Thr Gln Asn Leu Leu

20 25 Thr Gly Ala Cys Thr Ser Ser Ala Pro Thr Pro Ser Glu Ala Glu Glu 45 Gly Asp Arg Thr Pro Leu Ala Asp Ala Ala Asn Ala Ala Glu Glu Leu Tyr Arg Leu Arg Asp Thr Phe Phe Pro Arg Asp Pro Ser Glu Lys Val 70 Ala Ala Leu Arg Ala Arg Ala Asp Ala Ala Leu Ala Leu Leu Asp Ala 90 Phe Pro Ser Glu Gln Lys Lys Ser Arg Gln Leu Arg Gly Val Tyr Glu 105 Phe Leu Arg Gly Lys Ile Leu Asp Val Phe Pro Asp Tyr His Lys Glu 120 Ala Glu Asp His Leu Ser Lys Ala Val Lys Leu Asn Pro Ser Leu Val 135 Asp Ala Trp 145 (2) INFORMATION FOR SEQ ID NO:566: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 122 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..122
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482433

Thr Pro Ser Glu Ala Glu Glu Gly Asp Arg Thr Pro Leu Ala Asp Ala 20 25 30

Ala Asn Ala Ala Glu Glu Leu Tyr Arg Leu Arg Asp Thr Phe Phe Pro  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Arg Asp Pro Ser Glu Lys Val Ala Ala Leu Arg Ala Arg Ala Asp Ala 50 55 60

Ala Leu Ala Leu Leu Asp Ala Phe Pro Ser Glu Gln Lys Lys Ser Arg 65 70 75 80

Gln Leu Arg Gly Val Tyr Glu Phe Leu Arg Gly Lys Ile Leu Asp Val 85 90 95

Phe Pro Asp Tyr His Lys Glu Ala Glu Asp His Leu Ser Lys Ala Val 100 105 110

Lys Leu Asn Pro Ser Leu Val Asp Ala Trp
115 120

- (2) INFORMATION FOR SEQ ID NO:567:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 463 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..463
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482434
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

ataccgggat gggcgccatg ggcatcgtcg tcagagcgtg ggcgcctccc gctcttgccg ccgcggccgc gccggcaccc tccggctcca gggacaccgg tcaggcccag cggaggagca

agccctcgag gaccggccgc gtgcgcgtgc tcggcggcac tggccgtgtc ggaggatcca 180 cggccaccgc actctccaaa ctccgccca agcttggcat cctcgtcggt ggcaggaacc 240 gggagaaagg cgagtccatt gcagccaagc ttgggggcca gtctgagttc gtccaggtcg 300 acacccgcaa cacaggcatg ttggaggaag cgctgcaggt ggtagctgtt cgcggagttg ccaaaccgga ggcagctgcg acgccggcaa ggcgctcgcg ccccatccct ctggcttccg tggccgtgtg gagtctggtt gccactggcg ccgcaaatgc tgc

- (2) INFORMATION FOR SEQ ID NO:568:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 153 amino acids(B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..153
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482435
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

Thr Gly Met Gly Ala Met Gly Ile Val Val Arg Ala Trp Ala Pro Pro

Ala Leu Ala Ala Ala Ala Pro Ala Pro Ser Gly Ser Arg Asp Thr

Gly Gln Ala Gln Arg Arg Ser Lys Pro Ser Arg Thr Gly Arg Val Arg

Val Leu Gly Gly Thr Gly Arg Val Gly Gly Ser Thr Ala Thr Ala Leu
50 60

Ser Lys Leu Arg Pro Lys Leu Gly Ile Leu Val Gly Gly Arg Asn Arg 65 70 75 80

Glu Lys Gly Glu Ser Ile Ala Ala Lys Leu Gly Gly Gln Ser Glu Phe
85 90 95

Val Gln Val Asp Thr Arg Asn Thr Gly Met Leu Glu Glu Ala Leu Gln
100 105 110

Val Val Ala Val Arg Gly Val Ala Lys Pro Glu Ala Ala Ala Thr Pro 115 120 125

Ala Arg Arg Ser Arg Pro Ile Pro Leu Ala Ser Val Ala Val Trp Ser

Leu Val Ala Thr Gly Ala Ala Asn Ala 145

- (2) INFORMATION FOR SEQ ID NO:569:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 151 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..151
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482436
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

Met Gly Ala Met Gly Ile Val Val Arg Ala Trp Ala Pro Pro Ala Leu
1 10 15

Ala Ala Ala Ala Pro Ala Pro Ser Gly Ser Arg Asp Thr Gly Gln
20 25 30

Ala Gln Arg Arg Ser Lys Pro Ser Arg Thr Gly Arg Val Arg Val Leu 35 40 45

Gly Gly Thr Gly Arg Val Gly Gly Ser Thr Ala Thr Ala Leu Ser Lys
50 55 60
Leu Arg Pro Lys Leu Gly Ile Leu Val Gly Gly Arg Asn Arg Glu Lys

80 75 70 Gly Glu Ser Ile Ala Ala Lys Leu Gly Gly Gln Ser Glu Phe Val Gln 90 Val Asp Thr Arg Asn Thr Gly Met Leu Glu Glu Ala Leu Gln Val Val 100 105 Ala Val Arg Gly Val Ala Lys Pro Glu Ala Ala Ala Thr Pro Ala Arg 125 120 Arg Ser Arg Pro Ile Pro Leu Ala Ser Val Ala Val Trp Ser Leu Val 135 Ala Thr Gly Ala Ala Asn Ala 145 (2) INFORMATION FOR SEQ ID NO:570: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 148 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..148 (D) OTHER INFORMATION: / Ceres Seq. ID 1482437 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:570: Met Gly Ile Val Val Arg Ala Trp Ala Pro Pro Ala Leu Ala Ala 10 Ala Ala Pro Ala Pro Ser Gly Ser Arg Asp Thr Gly Gln Ala Gln Arg 20 Arg Ser Lys Pro Ser Arg Thr Gly Arg Val Arg Val Leu Gly Gly Thr 40 Gly Arg Val Gly Gly Ser Thr Ala Thr Ala Leu Ser Lys Leu Arg Pro 55 Lys Leu Gly Ile Leu Val Gly Gly Arg Asn Arg Glu Lys Gly Glu Ser Ile Ala Ala Lys Leu Gly Gly Gln Ser Glu Phe Val Gln Val Asp Thr 90 Arg Asn Thr Gly Met Leu Glu Glu Ala Leu Gln Val Val Ala Val Arg 105 100 Gly Val Ala Lys Pro Glu Ala Ala Ala Thr Pro Ala Arg Arg Ser Arg 125 120 Pro Ile Pro Leu Ala Ser Val Ala Val Trp Ser Leu Val Ala Thr Gly 140 135 130 Ala Ala Asn Ala 145 (2) INFORMATION FOR SEQ ID NO:571: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 511 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..511
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482438
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

aaacgacgcc gagggtttct aacaacgtaa aaagaagaag gaaagaacag catttggctc 60 cgtccgtacg tacaggggaa aggacaaaag gcttcgggcg gtggcggcg cgctggtcga 120 cgatcgttca gagcgcgggg agggagaaga ggtcgymgyc kscsatgtmt sykrarcsgc 180 agccgtcgac tcctggccac atcgggaggc tgccgaggtc gagcgcgggg tcsgcggcsa 240

60

ggtagtcgag gccgagctgc ggmgtgggca agtcgtcgtc gaacgggacg ccgccgtaaa 300 gagaacgcgt cctcgccgag ctggggcagg agcgcgtcat cggcggaraa cgggkwkagg 360 ccgccgsggc cgtcgggcgc ktctttcttg gtcgcacaac cggmggcggm gtycgyykat 420 tttyggcggc agartckcac gcgccgtctc gtcgggcatt gcccggagga cggagaccgg 480

- cgagccnacc accaketggg actegtegea g (2) INFORMATION FOR SEQ ID NO:572:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 80 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..80
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482439
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

Thr Thr Pro Arg Val Ser Asn Asn Val Lys Arg Arg Arg Lys Glu Gln

1 5 10 15

His Leu Ala Pro Ser Val Arg Thr Gly Glu Arg Thr Lys Gly Phe Gly
20 25 30

Arg Trp Arg Pro Arg Trp Ser Thr Ile Val Gln Ser Ala Gly Arg Glu
35 40 45

- (2) INFORMATION FOR SEQ ID NO:573:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 613 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..613
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482444
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:573: mrgtsccaag aatgttctca cgaagctgat taaatcattg aaccttagat taactgctgt

120 gcaactaatt gattcccatc tatgttgtga tcccgggaac tacgtaagtt cgctacttct ctccttatcc acaatgcttc acatggaact cccacatgtc aatatattgt ctaaaatcga 180 240 tctgattgga agctacggga agctagcttt caatttagat ttctataccg atgttcaaga 300 cttgtcatac ttggagcacc atcttagtca agatcctcgc tctgctaagt acagaaaact aacaaaagag ctatgtagtg tcattgaaga ttacagtctt gttaatttta caaccttgga 360 420 tattcaggat aaagaaagtg ttggggatct agtaaagctc atcgacaaga gcaatggata catatttgcc ggcattgatg caagtgtggt tgaatacagc aagattgcaa ttggtcaaac 480 tgattgggat tataacagag tcgcagctgt acaggagaag tacatggaag atgaggaaat 540 acaagactga gaacagtgct tgaaacttta tatagaagag agctggtcta aaatatctct 600 gaaccaaacc att

- (2) INFORMATION FOR SEQ ID NO:574:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 182 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide

#### (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..182
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482445

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

Xaa Xaa Lys Asn Val Leu Thr Lys Leu Ile Lys Ser Leu Asn Leu Arg 10

Leu Thr Ala Val Gln Leu Ile Asp Ser His Leu Cys Cys Asp Pro Gly 25

Asn Tyr Val Ser Ser Leu Leu Ser Leu Ser Thr Met Leu His Met 40

Glu Leu Pro His Val Asn Ile Leu Ser Lys Ile Asp Leu Ile Gly Ser 55

Tyr Gly Lys Leu Ala Phe Asn Leu Asp Phe Tyr Thr Asp Val Gln Asp 70 75

Leu Ser Tyr Leu Glu His His Leu Ser Gln Asp Pro Arg Ser Ala Lys 90

Tyr Arg Lys Leu Thr Lys Glu Leu Cys Ser Val Ile Glu Asp Tyr Ser 105

Leu Val Asn Phe Thr Thr Leu Asp Ile Gln Asp Lys Glu Ser Val Gly 120 125

Asp Leu Val Lys Leu Ile Asp Lys Ser Asn Gly Tyr Ile Phe Ala Gly 135 140

Ile Asp Ala Ser Val Val Glu Tyr Ser Lys Ile Ala Ile Gly Gln Thr 150 155

Asp Trp Asp Tyr Asn Arg Val Ala Ala Val Gln Glu Lys Tyr Met Glu 170 165

Asp Glu Glu Ile Gln Asp

180

#### (2) INFORMATION FOR SEQ ID NO:575:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 138 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..138
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482446

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

Met Leu His Met Glu Leu Pro His Val Asn Ile Leu Ser Lys Ile Asp 10

Leu Ile Gly Ser Tyr Gly Lys Leu Ala Phe Asn Leu Asp Phe Tyr Thr 25

Asp Val Gln Asp Leu Ser Tyr Leu Glu His His Leu Ser Gln Asp Pro 40

Arg Ser Ala Lys Tyr Arg Lys Leu Thr Lys Glu Leu Cys Ser Val Ile 5.5

Glu Asp Tyr Ser Leu Val Asn Phe Thr Thr Leu Asp Ile Gln Asp Lys 70

Glu Ser Val Gly Asp Leu Val Lys Leu Ile Asp Lys Ser Asn Gly Tyr 90 85

Ile Phe Ala Gly Ile Asp Ala Ser Val Val Glu Tyr Ser Lys Ile Ala 105 100

Ile Gly Gln Thr Asp Trp Asp Tyr Asn Arg Val Ala Ala Val Gln Glu 120

Lys Tyr Met Glu Asp Glu Glu Ile Gln Asp 135

## Attorney Docket No. 2140-1096P

- Client Docket No. 80142.004 (2) INFORMATION FOR SEQ ID NO:576: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 135 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..135 (D) OTHER INFORMATION: / Ceres Seq. ID 1482447 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:576: Met Glu Leu Pro His Val Asn Ile Leu Ser Lys Ile Asp Leu Ile Gly 10 Ser Tyr Gly Lys Leu Ala Phe Asn Leu Asp Phe Tyr Thr Asp Val Gln 25 20 Asp Leu Ser Tyr Leu Glu His His Leu Ser Gln Asp Pro Arg Ser Ala 40 Lys Tyr Arg Lys Leu Thr Lys Glu Leu Cys Ser Val Ile Glu Asp Tyr 55 Ser Leu Val Asn Phe Thr Thr Leu Asp Ile Gln Asp Lys Glu Ser Val 75 70 Gly Asp Leu Val Lys Leu Ile Asp Lys Ser Asn Gly Tyr Ile Phe Ala
- Thr Asp Trp Asp Tyr Asn Arg Val Ala Ala Val Gln Glu Lys Tyr Met
  115 120 125

  Glu Asp Glu Glu Ile Gln Asp
  130 135

85

- (2) INFORMATION FOR SEQ ID NO:577:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 518 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..518
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482457
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:577: gattttgaga aaaccatctc actgattagc caagatgtcg tcggctcgtt ctgcgatcac 60 aaagctaaag ctggctcgat cctttgggga gagtcagatt ggtgcatcgc gttcggtggt 120 atcgactcga ggaccggcga ttcggtactt cagtgacgat aaaggtcgtg tgctcagcga 180 240 agaggaacgc gcgaaagaga gcatgtatat ccagaaaatg gagagggaaa gactggagaa gaagaagaaa ctcgagcaag ataagctaga tggtgagaaa ggaagtgcca acaagaaacc 300 360 tgagacaagc aagccatgag tttatcactc acagtataca gaatccggtc ataaggcaag 420 cagtagtgaa aaacaataat gcctttgacc tatgttctct cttggtatga gagatcttgt acttgtacag agatctttaa ccttctgatg tgtgtgtttg tatgttctaa gaaatcaagt 480 ttaaaataat cgaaaaaaac aaccatatgc gttgattc

90

Gly Ile Asp Ala Ser Val Val Glu Tyr Ser Lys Ile Ala Ile Gly Gln

- (2) INFORMATION FOR SEQ ID NO:578:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 51 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..51
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482458

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:
Asp Phe Glu Lys Thr Ile Ser Leu Ile Ser Gln Asp Val Val Gly Ser
1 5 10 15

Phe Cys Asp His Lys Ala Lys Ala Gly Ser Ile Leu Trp Gly Glu Ser 20 25 30

Asp Trp Cys Ile Ala Phe Gly Gly Ile Asp Ser Arg Thr Gly Asp Ser 35 40 45

Val Leu Gln

- (2) INFORMATION FOR SEQ ID NO:579:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 94 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..94
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482459
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

Met Ser Ser Ala Arg Ser Ala Ile Thr Lys Leu Lys Leu Ala Arg Ser 1 5 10 15

Phe Gly Glu Ser Gln Ile Gly Ala Ser Arg Ser Val Val Ser Thr Arg 20 25 30

Gly Pro Ala Ile Arg Tyr Phe Ser Asp Asp Lys Gly Arg Val Leu Ser 35 40 45

Glu Glu Glu Arg Ala Lys Glu Ser Met Tyr Ile Gln Lys Met Glu Arg 50 55 60

Glu Arg Leu Glu Lys Lys Lys Leu Glu Gln Asp Lys Leu Asp Gly 65 70 75 80

Glu Lys Gly Ser Ala Asn Lys Lys Pro Glu Thr Ser Lys Pro 85 90

- (2) INFORMATION FOR SEQ ID NO:580:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1116 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1116
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482460
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

atagaacatc ctaatcgaaa aacattagtt ttgctgcgtt tagtattcaa tttcatcgac 60 ccaaatcaaa atatatagga tactagataa agagtgactg aaggagagaa aaacaaaaat 120 ggcgattgtt tccgtctcta actctttct cactttcaat tctcccaatc agctccgatt 180 tagccgaaga agattctctg ccatggcttc ttcaactact ggagtgagag tcgctgaagg 240 agaaggcaat ttgccaaaac tagtccttac ttctcctcag aacagcgagg ctgagatata 300 tctcttcgga ggctgcatta cttcttggaa agttgcgagc ggtaaagatc ttcttttgt 360 cagaccagat gctgtcttca ataagattaa gcccattagc ggagggattc cacattgttt 420 tccacagttt ggacctgggc taattcaaca gcatgggttt ggaaggaaca tggactggtc 480 tgttgtcgat tcccagaatg cagatgacaa tgctgctgtt actcttgagc ttaaggatgg 540 tecetatagt egagecatgt gggaetttge tttecagget etatacaagg teattgttgg 600 cgcggactcc ctttccactg agctaaagat tacaaacaca gacgataaac cattttcttt 660 cagcactgcg ctgcatactt acttccgtgc ttcttctgcg ggggcctccg tgagaggtct 720
aaagggttgt aaaaccctca ataaggatcc agaccctaag aacccaatag agggtaaaga 780
agacagggat gcagtcactt ttcctggatt tgtggatacc gtctatcttg atgctcccaa 840
tgaattgcag tttgataatg gcttgggtga taaaataatc atcaaaaaca caaattggtc ggatggaggct ttgtggaacc cgcatactca gatggaggct tgttacagag actttgtgtg 960
cgtggaaaat gcaaagcttg gggatgtcaa gctagagccg ggacagtctt ggactgcaac 1020
acaacttctc agcatcagtt gaaaacattg tactttaaac ttataatgtc cagtggatcc 1080
attttcttaa gcaataaaag ttttatttcc tctccc

- (2) INFORMATION FOR SEQ ID NO:581:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 307 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..307
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482461
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:
- Met Ala Ile Val Ser Val Ser Asn Ser Phe Leu Thr Phe Asn Ser Pro 1 5 10 15
- Asn Gln Leu Arg Phe Ser Arg Arg Phe Ser Ala Met Ala Ser Ser
- Thr Thr Gly Val Arg Val Ala Glu Gly Glu Gly Asn Leu Pro Lys Leu
- Val Leu Thr Ser Pro Gln Asn Ser Glu Ala Glu Ile Tyr Leu Phe Gly
  50 60
- Gly Cys Ile Thr Ser Trp Lys Val Ala Ser Gly Lys Asp Leu Leu Phe
- Val Arg Pro Asp Ala Val Phe Asn Lys Ile Lys Pro Ile Ser Gly Gly 85 90 95
- Ile Pro His Cys Phe Pro Gln Phe Gly Pro Gly Leu Ile Gln Gln His 100 105 110 Gly Phe Gly Arg Asn Met Asp Trp Ser Val Val Asp Ser Gln Asn Ala
- 115 120 125 Arg Asir Met Asp 11p bel val val Asp 202 225 125
- Asp Asp Asn Ala Ala Val Thr Leu Glu Leu Lys Asp Gly Pro Tyr Ser 130 135 140
- Arg Ala Met Trp Asp Phe Ala Phe Gln Ala Leu Tyr Lys Val Ile Val 145 150 155 160
- Gly Ala Asp Ser Leu Ser Thr Glu Leu Lys Ile Thr Asn Thr Asp Asp 165 170 175
- Lys Pro Phe Ser Phe Ser Thr Ala Leu His Thr Tyr Phe Arg Ala Ser 180 185 190
- Ser Ala Gly Ala Ser Val Arg Gly Leu Lys Gly Cys Lys Thr Leu Asn 195 200 205
- Lys Asp Pro Asp Pro Lys Asn Pro Ile Glu Gly Lys Glu Asp Arg Asp 210 215 220
- Ala Val Thr Phe Pro Gly Phe Val Asp Thr Val Tyr Leu Asp Ala Pro
- 225 230 235 240
  Asn Glu Leu Gln Phe Asp Asn Gly Leu Gly Asp Lys Ile Ile Ile Lys
- 245 250 255

  Asn Thr Asn Trp Ser Asp Ala Val Leu Trp Asn Pro His Thr Gln Met
  260 265 270
- Glu Ala Cys Tyr Arg Asp Phe Val Cys Val Glu Asn Ala Lys Leu Gly 275 280 285
- Asp Val Lys Leu Glu Pro Gly Gln Ser Trp Thr Ala Thr Gln Leu Leu 290 295 300

Ser Ile Ser

305

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 279 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..279
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482462
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:
- Met Ala Ser Ser Thr Thr Gly Val Arg Val Ala Glu Gly Glu Gly Asn
- Leu Pro Lys Leu Val Leu Thr Ser Pro Gln Asn Ser Glu Ala Glu Ile
- Tyr Leu Phe Gly Gly Cys Ile Thr Ser Trp Lys Val Ala Ser Gly Lys
- Asp Leu Phe Val Arg Pro Asp Ala Val Phe Asn Lys Ile Lys Pro
- Ile Ser Gly Gly Ile Pro His Cys Phe Pro Gln Phe Gly Pro Gly Leu
  70 75 80
- Ile Gln Gln His Gly Phe Gly Arg Asn Met Asp Trp Ser Val Val Asp 85 90 95
- Ser Gln Asn Ala Asp Asp Asn Ala Ala Val Thr Leu Glu Leu Lys Asp
- Gly Pro Tyr Ser Arg Ala Met Trp Asp Phe Ala Phe Gln Ala Leu Tyr 115 120 125
- Lys Val Ile Val Gly Ala Asp Ser Leu Ser Thr Glu Leu Lys Ile Thr 130 135 140
- Asn Thr Asp Asp Lys Pro Phe Ser Phe Ser Thr Ala Leu His Thr Tyr 145 150 155 160
- Phe Arg Ala Ser Ser Ala Gly Ala Ser Val Arg Gly Leu Lys Gly Cys 165 170 175
- Lys Thr Leu Asn Lys Asp Pro Asp Pro Lys Asn Pro Ile Glu Gly Lys
  180 185 190
- Glu Asp Arg Asp Ala Val Thr Phe Pro Gly Phe Val Asp Thr Val Tyr
  195 200 205
- Leu Asp Ala Pro Asn Glu Leu Gln Phe Asp Asn Gly Leu Gly Asp Lys 210 215 220
- Ile Ile Ile Lys Asn Thr Asn Trp Ser Asp Ala Val Leu Trp Asn Pro 225 230 235
- His Thr Gln Met Glu Ala Cys Tyr Arg Asp Phe Val Cys Val Glu Asn 245 250 255
- Ala Lys Leu Gly Asp Val Lys Leu Glu Pro Gly Gln Ser Trp Thr Ala 260 265 270

Thr Gln Leu Leu Ser Ile Ser 275

- (2) INFORMATION FOR SEQ ID NO:583:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 190 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..190

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(D) OTHER INFORMATION: / Ceres Seq. ID 1482463
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:
Met Asp Trp Ser Val Val Asp Ser Gln Asn Ala Asp Asp Asn Ala Ala
                                    1.0
Val Thr Leu Glu Leu Lys Asp Gly Pro Tyr Ser Arg Ala Met Trp Asp
                                25
Phe Ala Phe Gln Ala Leu Tyr Lys Val Ile Val Gly Ala Asp Ser Leu
                            40
Ser Thr Glu Leu Lys Ile Thr Asn Thr Asp Asp Lys Pro Phe Ser Phe
                        55
Ser Thr Ala Leu His Thr Tyr Phe Arg Ala Ser Ser Ala Gly Ala Ser
                                        7.5
                    70
Val Arg Gly Leu Lys Gly Cys Lys Thr Leu Asn Lys Asp Pro Asp Pro
                                    90
Lys Asn Pro Ile Glu Gly Lys Glu Asp Arg Asp Ala Val Thr Phe Pro
                                105
Gly Phe Val Asp Thr Val Tyr Leu Asp Ala Pro Asn Glu Leu Gln Phe
                                                 125
                            120
Asp Asn Gly Leu Gly Asp Lys Ile Ile Ile Lys Asn Thr Asn Trp Ser
                        135
                                             140
Asp Ala Val Leu Trp Asn Pro His Thr Gln Met Glu Ala Cys Tyr Arg
                                         155
                    150
Asp Phe Val Cys Val Glu Asn Ala Lys Leu Gly Asp Val Lys Leu Glu
                                    170
                165
Pro Gly Gln Ser Trp Thr Ala Thr Gln Leu Leu Ser Ile Ser
            180
                                 185
(2) INFORMATION FOR SEQ ID NO:584:
     (i) SEQUENCE CHARACTERISTICS:
```

- (A) LENGTH: 1430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1430
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482481
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

ccwagaamca tcctaatcaa aaaacaattc ccgaaattct ctcaaatcac agatcctttt 60 agggtttttc cactgtttct aggtttttt tattgctcaa atctgatcaa tggatagttg 120 tctctctaat caaacggcgc ttcagtttct cccgtcgcgt tccaggagac agagcggcga 180 240 tggaggcggt ggttttgtta ttccggcgaa gaggaagatc cagtatagtt cgatggttgt ggttgcggcg gcgggacaga gtcggtgtga gcctggaagc agtctaaacg cgccgcttga 300 360 gccacgatcg gcgcagggga ggtttctgag aagcgtgttg ctaaacaaac ggcagctatt 420 tcattacgcc gccgctgatg agctaaagca actggctgat gatagggaag ctgctttagc 480 tegtatgtet etcagetetg gtteegatga ggettetete cacagaagga tagetgaact caaggaacgc tactgtaaaa ctgcagtcca agacataatg tacatgttaa tcttttacaa 540 atactccgag ataagagtcc ctcttgttcc aaagctatcc agatgcatct ataatggaag 600 actcgagatc tggccttcaa aagactggga gttagagtca atttacagct gcgataccct 660 tgagatcatc aaagaacacg ttagcgcagt catcggatta cgggtcaact catgtgtgac 720 tgacaattgg gcaacaacgc agatacagaa actgcatctc aggaaagtat atgctgcctc 780 gatcttgtac ggttacttct tgaaatcagc ttccctaagg caccagcttg agtgttcctt 840 900 atcagatatt catggaagcg gatatctgaa aagtcccatc tttggatgct cattcacaac gggcactgca cagateteca acaagcagca getgagacat tacateteag actttgatee 960 1020 cgagacattg cagagatgcg caaaaccaag gacagaggag gcaaggaatc tgatagagaa gcaaagtttg gctctttttg gcacggaaga gagtgatgag accatagtga catcgttttc 1080 1140 gagtctgaag cggttggttc tcgaggctgt ggcgtttggg acattcctgt gggacacgga attgtatgta gatggtgcat ataagctgaa ggagaatggg aatgcagaag aacaagaagg 1200 aaagaaaagc atatgatgaa caagtctggt tagaagaaaa gcttcatgat cttctggtag 1260 tgtatatata gagaaatgta tctgccgaat ctctcaggca gttgttcagt tcaatgtata 132 gatcttgctt agaaatattt tgatttctga ataagaatgt ggtgtggtta taaggaataa 132 gagatactgt agttgggttc aattttatgt tatgtgttaa gtttccttgt (2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 368 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..368
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482482
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:
- Met Asp Ser Cys Leu Ser Asn Gln Thr Ala Leu Gln Phe Leu Pro Ser
- Arg Ser Arg Arg Gln Ser Gly Asp Gly Gly Gly Gly Phe Val Ile Pro
- Ala Lys Arg Lys Ile Gln Tyr Ser Ser Met Val Val Val Ala Ala Ala 35 40 45
- Gly Gln Ser Arg Cys Glu Pro Gly Ser Ser Leu Asn Ala Pro Leu Glu
  50 55 60
- Pro Arg Ser Ala Gln Gly Arg Phe Leu Arg Ser Val Leu Leu Asn Lys 65 70 75 80
- Arg Gln Leu Phe His Tyr Ala Ala Ala Asp Glu Leu Lys Gln Leu Ala 85 90 95
- Asp Asp Arg Glu Ala Ala Leu Ala Arg Met Ser Leu Ser Ser Gly Ser 100 105 110
- Asp Glu Ala Ser Leu His Arg Arg Ile Ala Glu Leu Lys Glu Arg Tyr 115 120 125
- Cys Lys Thr Ala Val Gln Asp Ile Met Tyr Met Leu Ile Phe Tyr Lys
- Tyr Ser Glu Ile Arg Val Pro Leu Val Pro Lys Leu Ser Arg Cys Ile 145 150 155 160
- Tyr Asn Gly Arg Leu Glu Ile Trp Pro Ser Lys Asp Trp Glu Leu Glu 165 170 175
- Ser Ile Tyr Ser Cys Asp Thr Leu Glu Ile Ile Lys Glu His Val Ser 180 185 190
- Ala Val Ile Gly Leu Arg Val Asn Ser Cys Val Thr Asp Asn Trp Ala 195 200 205
- Thr Thr Gln Ile Gln Lys Leu His Leu Arg Lys Val Tyr Ala Ala Ser 210 215 220
- Ile Leu Tyr Gly Tyr Phe Leu Lys Ser Ala Ser Leu Arg His Gln Leu 225 230 235 240
- Glu Cys Ser Leu Ser Asp Ile His Gly Ser Gly Tyr Leu Lys Ser Pro 245 250 255
- Ile Phe Gly Cys Ser Phe Thr Thr Gly Thr Ala Gln Ile Ser Asn Lys 260 265 270
- Gln Gln Leu Arg His Tyr Ile Ser Asp Phe Asp Pro Glu Thr Leu Gln 275 280 285
- Arg Cys Ala Lys Pro Arg Thr Glu Glu Ala Arg Asn Leu Ile Glu Lys
  290 295 300
- Gln Ser Leu Ala Leu Phe Gly Thr Glu Glu Ser Asp Glu Thr Ile Val 305 310 315 320 Thr Ser Phe Ser Ser Leu Lys Arg Leu Val Leu Glu Ala Val Ala Phe
- 325 330 335
  Gly Thr Phe Leu Trp Asp Thr Glu Leu Tyr Val Asp Gly Ala Tyr Lys

Leu Lys Glu Asn Gly Asn Ala Glu Glu Glu Glu Gly Lys Lys Ser Ile 355 360 365

- (2) INFORMATION FOR SEQ ID NO:586:

  (i) SEQUENCE CHARACTERISTICS:

  (A) LENGTH: 327 amino acids

  (B) TYPE: amino acid

  (C) STRANDEDNESS:

  (D) TOPOLOGY: linear

  (ii) MOLECULE TYPE: peptide

  (ix) FEATURE:

  (A) NAME/KEY: peptide

  (B) LOCATION: 1..327

  (D) OTHER INFORMATION: / Ce
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482483 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:
  Met Val Val Val Ala Ala Ala Gly Gln Ser Arg Cys Glu Pro Gly Ser

10 15
Ser Leu Asn Ala Pro Leu Glu Pro Arg Ser Ala Gln Gly Arg Phe Leu
20 25 30

Arg Ser Val Leu Leu Asn Lys Arg Gln Leu Phe His Tyr Ala Ala Ala 35

Asp Glu Leu Lys Gln Leu Ala Asp Asp Arg Glu Ala Ala Leu Ala Arg 50 55

Met Ser Leu Ser Ser Gly Ser Asp Glu Ala Ser Leu His Arg Arg Ile
65 70 75 80

Ala Glu Leu Lys Glu Arg Tyr Cys Lys Thr Ala Val Gln Asp Ile Met 85 90 95 Tyr Met Leu Ile Phe Tyr Lys Tyr Ser Glu Ile Arg Val Pro Leu Val

100 105 110
Pro Lys Leu Ser Arg Cys Ile Tyr Asn Gly Arg Leu Glu Ile Trp Pro

115 120 125
Ser Lys Asp Trp Glu Leu Glu Ser Ile Tyr Ser Cys Asp Thr Leu Glu
135 140

130 135 140

Ile Ile Lys Glu His Val Ser Ala Val Ile Gly Leu Arg Val Asn Ser

145 150 155 160
Cys Val Thr Asp Asn Trp Ala Thr Thr Gln Ile Gln Lys Leu His Leu

165 170 175

Arg Lys Val Tyr Ala Ala Ser Ile Leu Tyr Gly Tyr Phe Leu Lys Ser
180 185 190

Ala Ser Leu Arg His Gln Leu Glu Cys Ser Leu Ser Asp Ile His Gly
195
200
205

Ser Gly Tyr Leu Lys Ser Pro Ile Phe Gly Cys Ser Phe Thr Thr Gly 210 215 220

Thr Ala Gln Ile Ser Asn Lys Gln Gln Leu Arg His Tyr Ile Ser Asp 225 230 235 240

Phe Asp Pro Glu Thr Leu Gln Arg Cys Ala Lys Pro Arg Thr Glu Glu 245 250 255

Ala Arg Asn Leu Ile Glu Lys Gln Ser Leu Ala Leu Phe Gly Thr Glu 260 265 270

Glu Ser Asp Glu Thr Ile Val Thr Ser Phe Ser Ser Leu Lys Arg Leu 275 280 285

Val Leu Glu Ala Val Ala Phe Gly Thr Phe Leu Trp Asp Thr Glu Leu 290 295 300

Tyr Val Asp Gly Ala Tyr Lys Leu Lys Glu Asn Gly Asn Ala Glu Glu 305 310 315 320

Gln Glu Gly Lys Lys Ser Ile 325

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 263 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..263
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482484
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

Met Ser Leu Ser Ser Gly Ser Asp Glu Ala Ser Leu His Arg Arg Ile
1 10 15

Ala Glu Leu Lys Glu Arg Tyr Cys Lys Thr Ala Val Gln Asp Ile Met 20 25 30

Tyr Met Leu Ile Phe Tyr Lys Tyr Ser Glu Ile Arg Val Pro Leu Val

Pro Lys Leu Ser Arg Cys Ile Tyr Asn Gly Arg Leu Glu Ile Trp Pro 50 55 60

Ser Lys Asp Trp Glu Leu Glu Ser Ile Tyr Ser Cys Asp Thr Leu Glu 65 70 75 80

Ile Ile Lys Glu His Val Ser Ala Val Ile Gly Leu Arg Val Asn Ser

Cys Val Thr Asp Asn Trp Ala Thr Thr Gln Ile Gln Lys Leu His Leu 100 105 110

Arg Lys Val Tyr Ala Ala Ser Ile Leu Tyr Gly Tyr Phe Leu Lys Ser

Ala Ser Leu Arg His Gln Leu Glu Cys Ser Leu Ser Asp Ile His Gly
130 135 140

Ser Gly Tyr Leu Lys Ser Pro Ile Phe Gly Cys Ser Phe Thr Thr Gly
145 150 155 160

Thr Ala Gln Ile Ser Asn Lys Gln Gln Leu Arg His Tyr Ile Ser Asp 165 170 175

Phe Asp Pro Glu Thr Leu Gln Arg Cys Ala Lys Pro Arg Thr Glu Glu 180 185 190

Ala Arg Asn Leu Ile Glu Lys Gln Ser Leu Ala Leu Phe Gly Thr Glu 195 200 205

Glu Ser Asp Glu Thr Ile Val Thr Ser Phe Ser Ser Leu Lys Arg Leu 210 215 220

Val Leu Glu Ala Val Ala Phe Gly Thr Phe Leu Trp Asp Thr Glu Leu 225 230 235 240

Tyr Val Asp Gly Ala Tyr Lys Leu Lys Glu Asn Gly Asn Ala Glu Glu 245 250 255

Gln Glu Gly Lys Lys Ser Ile

- (2) INFORMATION FOR SEQ ID NO:588:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 662 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..662
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482490
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

atcgaaaaag atcgaaaaaa aatcgagaag cgaatagcgg aagaacagaa aaagggaaat tctgagaatc aaatcggaaa ggtagaagaa tcgagtcgga aaaatggaaa cgacgaaaag

t.c

| taacagcagc gagtccgatc<br>tcgctttgtc tactcttccc<br>ggttacgaga tgggcgtcga<br>agattgttct cgtgtttttc<br>caagagtaca gagacttctc<br>ggaggtaaaa aaccaaaca<br>acaaggcttt tgagataac<br>gtacactgat gtcaaaatt<br>tgttcttta cttgagaaa | tcggcggcgc<br>ttgcttttgg<br>atgcgtcttc<br>tatctcaggc<br>tgatagggtt<br>ccattgttaa<br>ttaatgaccc | tttcgccggt<br>tgctggaatt<br>ttcaacttca<br>agcagaagag<br>acattacgaa<br>aaaaaaactt<br>actcattttt | gttattett<br>ggtattggtt<br>gctactttat<br>tgaagacaac<br>atggtaattg<br>ttgcttctca<br>ttttgttttg | tcaggagtcc<br>ctgcatacac<br>tagcagctcc<br>gaggaagctt<br>atcttgcagg<br>gtgtggtttt<br>aaaaatctta | 180<br>240<br>300<br>360<br>420<br>480<br>540<br>600<br>660 |
|--|--|--|---|--|---|
|--|--|--|---|--|---|

- (2) INFORMATION FOR SEQ ID NO:589:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 99 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..99
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482491
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:
- Met Glu Thr Thr Lys Ser Asn Ser Ser Glu Ser Asp Val Asn Ala Lys 10
- Trp Asp Ala Cys Leu Asp Leu Thr Ala Arg Arg Phe Val Tyr Ser Ser 20 25
- Leu Gly Gly Ala Phe Ala Gly Leu Leu Phe Phe Arg Ser Pro Val Thr 40
- Arg Trp Ala Ser Ile Ala Phe Gly Ala Gly Ile Gly Ile Gly Ser Ala
- Tyr Thr Asp Cys Ser Arg Val Phe Asp Ala Ser Ser Ser Thr Ser Ala 75 70
- Thr Leu Leu Ala Ala Pro Lys Ser Thr Glu Thr Ser Val Ser Gln Ala 90

Ala Glu Glu

- (2) INFORMATION FOR SEQ ID NO:590:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 71 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..71
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482492
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:
- Met Ser Thr Pro Asn Gly Thr Leu Val Ser Ile Ser Leu Leu Val Ala 10
- Leu Ser Thr Leu Pro Ser Ala Ala Leu Ser Pro Val Phe Ser Ser Ser 25
- Gly Val Arg Leu Arg Asp Gly Arg Arg Leu Leu Val Leu Glu Leu 40
- Val Leu Val Leu His Thr Gln Ile Val Leu Val Phe Leu Met Arg Leu
- Leu Gln Leu Gln Leu Leu Tyr
- (2) INFORMATION FOR SEQ ID NO:591:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 56 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..56
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482493
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

Met Gly Arg Leu Ser Arg Ser His Cys Ser Ser Leu Cys Leu Leu Phe

Pro Arg Arg Phe Arg Arg Ser Ser Leu Leu Gln Glu Ser Gly Tyr 20 25 30

Glu Met Gly Val Asp Cys Phe Trp Cys Trp Asn Trp Tyr Trp Phe Cys 35 40 45

Ile His Arg Leu Phe Ser Cys Phe 50 55

- (2) INFORMATION FOR SEQ ID NO:592:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 853 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..853
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482504
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:592: ccattaccwa kaacatccta atcgaaaagt aatcggagtt caggcttcag cattctctct 60 tcttctctct cgcagccgta gtttttgatc ttctcttcaa ttctctctcc tgatggccac 120 gtccgccgtc ctctccggtg ccagatcgat gcttcgagct gcttcctcac gcagcgccgc 180 240 tgcttctact ggccgcttcg cctctcaagc gaaatccgct ccaccattgt ttagagccac 300 tgccagaaga agcccactgc tttctcctct ccgaaatcct gtggaactga gcttctgtgt ggagtcattg ttaccatatc actcggctac agcttcagcg ctaatgactt caaagctttc 360 tatctctggc caaacctatg gctggctctc tgacggctga cacaagtgta gatgaagaca 420 acgaagccaa gatctgggta taaacgatta gaacgggttt caggcaataa gataggcttt 480 agatacacat caagcaatgg ttgatgctgc attgtgtttt aaaagaactg gttcttacat 540 atcttcttaa aaaaaataca tgtacccgga aaagtgcctt cttttcttgd tggttatagc 600 atttgagtta ttactgattg gtcttatact cccagcttgc aatgatgatg tgtgatgagt 660 tagccagagg aacaatgaag ctacagttta tgtacaaaac tctacctttt aaagcctttc 720 ttcttaaaaa acttaggaac gaaaaccctc ttaattttgt ttctgagttt cttggagagc 780 ttttgtttgt tttcagccta ttaagtaaga catgttgtat tggttggacg agtaactgat 840 gtttggtata att
- (2) INFORMATION FOR SEQ ID NO:593:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 95 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..95
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482505
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

Met Ala Thr Ser Ala Val Leu Ser Gly Ala Arg Ser Met Leu Arg Ala

10 Ala Ser Ser Arg Ser Ala Ala Ala Ser Thr Gly Arg Phe Ala Ser Gln 25

Ala Lys Ser Ala Pro Pro Leu Phe Arg Ala Thr Ala Arg Arg Ser Pro 40

Leu Leu Ser Pro Leu Arg Asn Pro Val Glu Leu Ser Phe Cys Val Glu 60 5.5

Ser Leu Leu Pro Tyr His Ser Ala Thr Ala Ser Ala Leu Met Thr Ser 75 70

Lys Leu Ser Ile Ser Gly Gln Thr Tyr Gly Trp Leu Ser Asp Gly 90 85

- (2) INFORMATION FOR SEQ ID NO:594:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 83 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..83
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482506
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

Met Leu Arg Ala Ala Ser Ser Arg Ser Ala Ala Ser Thr Gly Arg 10 5

Phe Ala Ser Gln Ala Lys Ser Ala Pro Pro Leu Phe Arg Ala Thr Ala 25

Arg Arg Ser Pro Leu Leu Ser Pro Leu Arg Asn Pro Val Glu Leu Ser 40

Phe Cys Val Glu Ser Leu Leu Pro Tyr His Ser Ala Thr Ala Ser Ala 55

Leu Met Thr Ser Lys Leu Ser Ile Ser Gly Gln Thr Tyr Gly Trp Leu 75

Ser Asp Gly

- (2) INFORMATION FOR SEQ ID NO:595:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 65 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..65
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482507
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

Met Met Met Cys Asp Glu Leu Ala Arg Gly Thr Met Lys Leu Gln Phe 10

Met Tyr Lys Thr Leu Pro Phe Lys Ala Phe Leu Leu Lys Lys Leu Arg 25 20

Asn Glu Asn Pro Leu Asn Phe Val Ser Glu Phe Leu Gly Glu Leu Leu 40

Phe Val Phe Ser Leu Leu Ser Lys Thr Cys Cys Ile Gly Trp Thr Ser

Asn

- (2) INFORMATION FOR SEQ ID NO:596:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..1139
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482508
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:596: caatcatctg atctttccct ctctcagcaa tgcatgatct tcgattttct atcagtgttc 60 aaagctgaaa aaaatcgaac tgggtctgtt gatttcttca ggtctaaaat cagattagat 120 tagagaagaa gaagaagaat gctggaagct gtagatagct caggagtggt gaatggagga 180 ttcccgcaga ttcagagett ttacggcgat tgcagtagtg aagaagagtt atcggtattg 240 ccacgicata caaaagiggt ggtcaccgga aacaaccgga cgaaaicggt gctigttggt 300 cttcaaggtg ttgtcaaaaa agctgtcggt ctcggtggtt ggcattggct ggttttgaca 360 aatggaatag aagtaaagtt gcagaggaat gcgcttagtg tccttgaacc tcctactgga 420 aacgaagaag acgatgatct tgatttcgaa aacacacaga ggaatggctc tgatatgatt 480 gtttcttttc cagcatctga ggacacactg aagcctcata agtcgaagct aagagggcag 540 agatcatctc ggtcatctca caagacgatg agcaggtctc tatcatctga ctcgcaatca 600 aaaagttcgg gttttactcc tcctgaaaac atgaaggttg atcttagcaa attggaaatg 660 cctgctttac tgaattattg gcgacatttt aaccttgtgg atgcaattcc aaatccatca 720 aaggagcaac taattgacat tgttcaaagg cacttcatgt ctcagcaaat ggatgagctt 780 caggttattg tggggtttgt ccaagctgca aagagaatga agaaggcttg caagtttcaa 840 tccaaagaat ccagaaacac tgatcttaac tgcatcagct aaagaaaagc cctgactctt 900 aacaaatcct gtatgtacgg tacatcaact tgtttaacca tttgtggctt gctaagttta 960 gttcttctag tgatgtttgg ctaaagggta gatgttgttt cttctttgct tctgttgttt 1020 agccaatgta agtaccatca aaaaacccaa ataactctct aaagctccct attggaaact 1080 atcttgtctg atacgatctg gagtgaccgg tatgttgtta gaatgtaaat atgtttggt
- (2) INFORMATION FOR SEQ ID NO:597: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 247 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..247
    - OTHER INFORMATION: / Ceres Seq. ID 1482509

|     |   |     | )) O.T    |          |     |     |     |     |           |     |     |     |     |     |     |
|-----|---|-----|-----------|----------|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----|-----|
|     | (xi) SEQUENCE DESCRIPTION: SEQ ID NO:597: Met Leu Glu Ala Val Asp Ser Ser Gly Val Val Asn Gly Gly Phe Pro |     |           |          |     |     |     |     |           |     |     |     |     |     |     |
| 1   | Leu   | Glu | Ala       | Val<br>5 | Asp | Ser | Ser | Gly | Val<br>10 | Val | Asn |     |     | 10  |     |
|     |   |     | Ser<br>20 |          |     |     |     | 25  |           |     |     |     | 30  |     |     |
|     |   | 25  | Arg       |          |     |     | 40  |     |           |     |     | 45  |     |     |     |
| _   | E 0   | Val | Leu       |          |     | 55  |     |     |           |     | 60  |     |     |     |     |
| C E | Gly   |     | Trp       |          | 70  |     |     |     |           | 75  |     |     |     |     | 00  |
| Leu |   |     | Asn       | 85       |     |     |     |     | 90        |     |     |     |     | 93  |     |
|     |   |     | Asp       | Leu      |     |     |     | 105 |           |     |     |     | 110 |     |     |
|     |   | 115 | Ser       |          |     |     | 120 |     |           |     |     | 123 |     |     |     |
| Ser | Lys   | Leu | Arg       | Gly      | Gln | Arg | Ser | Ser | Arg       | Ser | Ser | His | Lys | Thr | Met |

135

60

120

180

Ser Arg Ser Leu Ser Ser Asp Ser Gln Ser Lys Ser Ser Gly Phe Thr 155 150 Pro Pro Glu Asn Met Lys Val Asp Leu Ser Lys Leu Glu Met Pro Ala 175 170 165 Leu Leu Asn Tyr Trp Arg His Phe Asn Leu Val Asp Ala Ile Pro Asn 190 185 180 Pro Ser Lys Glu Gln Leu Ile Asp Ile Val Gln Arg His Phe Met Ser 200 Gln Gln Met Asp Glu Leu Gln Val Ile Val Gly Phe Val Gln Ala Ala 220 215 Lys Arg Met Lys Lys Ala Cys Lys Phe Gln Ser Lys Glu Ser Arg Asn 235 230 Thr Asp Leu Asn Cys Ile Ser 245 (2) INFORMATION FOR SEQ ID NO:598: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 135 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (ix) FEATURE: (A) NAME/KEY: peptide (B) LOCATION: 1..135 (D) OTHER INFORMATION: / Ceres Seq. ID 1482510 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:598: Met Ile Val Ser Phe Pro Ala Ser Glu Asp Thr Leu Lys Pro His Lys 10 Ser Lys Leu Arg Gly Gln Arg Ser Ser Arg Ser Ser His Lys Thr Met 25 2.0 Ser Arg Ser Leu Ser Ser Asp Ser Gln Ser Lys Ser Ser Gly Phe Thr 40 Pro Pro Glu Asn Met Lys Val Asp Leu Ser Lys Leu Glu Met Pro Ala 55 Leu Leu Asn Tyr Trp Arg His Phe Asn Leu Val Asp Ala Ile Pro Asn 75 70 Pro Ser Lys Glu Gln Leu Ile Asp Ile Val Gln Arg His Phe Met Ser 90 Gln Gln Met Asp Glu Leu Gln Val Ile Val Gly Phe Val Gln Ala Ala 110 105 Lys Arg Met Lys Lys Ala Cys Lys Phe Gln Ser Lys Glu Ser Arg Asn 115 120 Thr Asp Leu Asn Cys Ile Ser 135 130 (2) INFORMATION FOR SEQ ID NO:599: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 1323 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: DNA (genomic) (ix) FEATURE: (A) NAME/KEY: -(B) LOCATION: 1..1323 (D) OTHER INFORMATION: / Ceres Seq. ID 1482514 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:599: ccattaccta gaacatccta atcaaaaaat tgatgttgat gataaagtct tatctgtttc aattgatgca ggatgatgga gattgggctg ctattggtgt gaaagatggt caaaaattga

tgatgatggg aactgctgat gagatagtga aagctcctga gaaggccatt gtttttgcag

ttt

agaatctacc tgaagaagcg ctagccacta atctgggtta cagtgctggc cttgtcaatc 240 300 ttggcaacac gtgttacatg aactccacgg tgcagtgctt aaaatctgtc ccagagttga aatctgcatt atccaattac tcacttgctg cccgaagcaa tgatgttgac cagacttctc 360 acatgctcac agttgccaca cgtgagttat ttggtgagct tgatagaagt gtcaatgctg 420 480 tttcgccttc acagttctgg atggtattac gaaaaaagta tcctcagttt agtcagttgc 540 agaatggaat gcacatgcag caggatgctg aagaatgttg gacacaactg ttatacaccc tttctcagtc cctaaaagca ccaacttcca gcgaaggtgc tgatgctgtg aaagctctat 600 ttggtgtcaa tctccagagc aggttgcatt gtcaagaaag tggcgaagaa agctcagaga 660 cagaatctgt atattctcta aaatgtcata tatcacatga agtgaaccac ttgcatgaag 720 gattaaaaca tggactgaaa ggggaacttg aaaaaacatc tcctgctctt ggccgtactg 780 840 cactctacgt caaggagtca cttatagatt ccttgccaag gtacttgact gttcagttcg 900 tgcggttttt ctggaaaagg gagagtaatc agaaagcaaa gatcctcagg aaagtggatt acccgctggt gttggatata tttgaccttt gctctgagga tcttcggaag aaactggaag 960 1020 ctcctcgcca gaaacttaga gaggaggaag gtaaaaagct tggtcttcaa actagtgcta agagtggctc aaaggacagt gatgtgaaaa tgactgatgc agaggcgtct gcaaatggaa 1080 gtggagaatc atccacagta aacccacagg aaggtacttt gagccactct tagcactagt 1140 ttgaagacca agcctaaaca atgcttccac cttgtgttct ttttggatta taayccttca 1200 tgagttaatt ttggttgaac ctttggtagt atatgttgct ggattgtgca ccttctgttt 1260 tcatctcctc ttccaaacta ctttattttt gcttatagat cttaatgttc tagttttgct 1320

- (2) INFORMATION FOR SEQ ID NO:600:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 366 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..366
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482515
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:
- Met Leu Met Ile Lys Ser Tyr Leu Phe Gln Leu Met Gln Asp Asp Gly 1 5 10 15
- Asp Trp Ala Ala Ile Gly Val Lys Asp Gly Gln Lys Leu Met Met Met 20 25 30
- Gly Thr Ala Asp Glu Ile Val Lys Ala Pro Glu Lys Ala Ile Val Phe 35 40 45 Ala Glu Asn Leu Pro Glu Glu Ala Leu Ala Thr Asn Leu Gly Tyr Ser
- 50 55 60
  Ala Gly Leu Val Asn Leu Gly Asn Thr Cys Tyr Met Asn Ser Thr Val
- 65 70 75 80
  Gln Cys Leu Lys Ser Val Pro Glu Leu Lys Ser Ala Leu Ser Asn Tyr
- Ser Leu Ala Ala Arg Ser Asn Asp Val Asp Gln Thr Ser His Met Leu
  100 . 105 . 110
- Thr Val Ala Thr Arg Glu Leu Phe Gly Glu Leu Asp Arg Ser Val Asn 115 120 125
- Ala Val Ser Pro Ser Gln Phe Trp Met Val Leu Arg Lys Lys Tyr Pro
- Gln Phe Ser Gln Leu Gln Asn Gly Met His Met Gln Gln Asp Ala Glu
  145 150 155 160
- Glu Cys Trp Thr Gln Leu Leu Tyr Thr Leu Ser Gln Ser Leu Lys Ala 165 170 175
- Pro Thr Ser Ser Glu Gly Ala Asp Ala Val Lys Ala Leu Phe Gly Val 180 - 185 - 190 Asn Leu Gln Ser Arg Leu His Cys Gln Glu Ser Gly Glu Glu Ser Ser
- 195 200 205
  Glu Thr Glu Ser Val Tyr Ser Leu Lys Cys His Ile Ser His Glu Val

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|------------|------------|------------|------------|------------------|------------|------------|------------|------------|------------|--------------|------------|------------|------------|------------|--------------|
|            | 210        |            |            |                  |            | 215        |            |            |            |              | 220        |            |            |            |              |
| Asn<br>225 | His        | Leu        | His        | Glu              | Gly<br>230 | Leu        | Lys        | His        | Gly        | Leu<br>235   | Lys        | Gly        | Glu        | Leu        | Glu<br>240   |
| Lys        | Thr        | Ser        | Pro        | Ala<br>245       | Leu        | Gly        | Arg        | Thr        | Ala<br>250 | Leu          | Tyr        | Val        | Lys        | Glu<br>255 | Ser          |
| Leu        | Ile        | Asp        | Ser<br>260 | Leu              | Pro        | Arg        | Tyr        | Leu<br>265 | Thr        | Val          | Gln        | Phe        | Val<br>270 | Arg        | Phe          |
| Phe        | Trp        | Lys<br>275 | Arg        | Glu              | Ser        | Asn        | Gln<br>280 |            | Ala        | Lys          | Ile        | Leu<br>285 | Arg        | Lys        | Val          |
| Asp        | Tyr<br>290 | Pro        | Leu        | Val              | Leu        | Asp<br>295 | Ile        | Phe        | Asp        | Leu          | Cys<br>300 | Ser        | Glu        | Asp        | Leu          |
| Ara        | LVS        | Lvs        | Leu        | Glu              | Ala        | Pro        | Arq        | Gln        | Lys        | Leu          |            | Glu        | Glu        | Glu        | Gly          |
| 305        |            |            |            |                  | 310        |            |            |            |            | 315          |            |            |            |            | 320          |
| Lys        |            |            |            | 325              |            | Thr        |            |            | 330        |              |            |            |            | 335        |              |
| Asp        | Val        | Lys        | Met<br>340 | Thr              | Asp        | Ala        | Glu        | Ala<br>345 | Ser        | Ala          | Asn        | Gly        | Ser<br>350 | Gly        | Glu          |
| Ser        | Ser        | Thr<br>355 | Val        | Asn              | Pro        | Gln        | Glu<br>360 | Gly        | Thr        | Leu          | Ser        | His<br>365 | Ser        |            |              |
| (2)        | INF        |            | TION       | FOR              | SEQ        | ID N       | 10:60      | 1:         |            |              |            |            |            |            |              |
| ν – γ      |            | ) SE       | QUEN       | CE CI            | HARA       | CTERI      | STIC       | CS:        |            |              |            |            |            |            |              |
|            | •          | ()         | A) L       | ENGT             | H: 36      | 54 an      | nino       | acio       | is         |              |            |            |            |            |              |
|            |            |            |            |                  |            | no ac      | cid        |            |            |              |            |            |            |            |              |
|            |            |            |            |                  | DEDNI      |            |            |            |            |              |            |            |            |            |              |
|            |            |            |            |                  |            | line       |            |            |            |              |            |            |            |            |              |
|            |            |            |            |                  | YPE:       | pept       | ilde       |            |            |              |            |            |            |            |              |
|            | (ix        | ) FE.      | ATUR:      | E:               | re to te a | nont       | - i do     |            |            |              |            |            |            |            |              |
|            |            | ( .        | A) N       | ለጣይ / .<br>በር አጥ | LOM•       | pept       | 364        |            |            |              |            |            |            |            |              |
|            |            | (          | ם נם       | THER             | INF        | ORMA!      | TION       | : / (      | Cere       | s Se         | q. I       | D 14       | 8251       | 6          |              |
|            | (xi        | ) SE       | OUEN       | CE D             | ESCR       | IPTI       | : NC       | SEQ :      | ID N       | 0:60         | 1:         |            |            |            |              |
| Met        | Ile        | Lys        | Ser        | Tyr              | Leu        | Phe        | Gln        | Leu        | Met        | Gln          | Asp        | Asp        | Gly        | Asp        | Trp          |
| 1          |            |            |            | 5                |            |            |            |            | 10         |              |            |            |            | 15         |              |
|            |            |            | 2.0        |                  |            |            |            | 25         |            |              |            |            | 30         |            | Thr          |
|            |            | 35         |            |                  |            |            | 40         |            |            |              |            | 45         |            |            | Glu          |
|            | 50         |            |            |                  |            | 55         |            |            |            |              | 60         |            |            |            | Gly          |
| Leu<br>65  | Val        | Asn        | Leu        | Gly              | Asn<br>70  | Thr        | Cys        | Tyr        | Met        | . Asn<br>75  | Ser        | Thr        | Val        | . Gln      | Cys<br>80    |
| Leu        | Lys        | Ser        | Val        | Pro              |            | Leu        | Lys        | Ser        | Ala<br>90  | Leu          | Ser        | Asn        | Туг        | Ser<br>95  | Leu          |
| Ala        | a Ala      | Arg        | Ser<br>100 | Asn              | Asp        | Val        | Asp        | Gln<br>105 | Thr        | Ser          | His        | Met        | Let<br>110 | ı Thr      | Val          |
| Ala        | a Thr      | Arc<br>115 | g Glu      | Lev              | Phe        | Gly        | Glu<br>120 | Leu        |            | Arç          | ser Ser    | • Val      | Asr        | n Ala      | a Val        |
| Sei        | Pro        | Sei        | Glr        | Phe              | Trp        | Met<br>135 | Val        |            | Arg        | J Lys        | Lys<br>140 | Tyr        | Pro        | o Glr      | n Phe        |
|            | Glr        | ,<br>1 Let | ı Glr      | n Asr            |            | Met        | His        | Met        | Glr        | n Glr<br>155 | ı Asp      |            | a Glu      | ı Glu      | 1 Cys<br>160 |
| 14:<br>Tr  | o<br>o Thi | Glı        | ı Leı      | ı Leu            |            | Thr        | Leu        | ser        | Glr        | n Sei        |            | ı Lys      | s Ala      | a Pro      | Thr          |

165 170 175

Ser Ser Glu Gly Ala Asp Ala Val Lys Ala Leu Phe Gly Val Asn Leu

Gln Ser Arg Leu His Cys Gln Glu Ser Gly Glu Glu Ser Ser Glu Thr

Glu Ser Val Tyr Ser Leu Lys Cys His Ile Ser His Glu Val Asn His

180

195 200

215

Leu His Glu Gly Leu Lys His Gly Leu Lys Gly Glu Leu Glu Lys Thr 235 230 Ser Pro Ala Leu Gly Arg Thr Ala Leu Tyr Val Lys Glu Ser Leu Ile 250 245 Asp Ser Leu Pro Arg Tyr Leu Thr Val Gln Phe Val Arg Phe Phe Trp 265 Lys Arg Glu Ser Asn Gln Lys Ala Lys Ile Leu Arg Lys Val Asp Tyr 280 Pro Leu Val Leu Asp Ile Phe Asp Leu Cys Ser Glu Asp Leu Arg Lys 300 295 Lys Leu Glu Ala Pro Arg Gln Lys Leu Arg Glu Glu Gly Lys Lys 315 310 Leu Gly Leu Gln Thr Ser Ala Lys Ser Gly Ser Lys Asp Ser Asp Val 325 330 Lys Met Thr Asp Ala Glu Ala Ser Ala Asn Gly Ser Gly Glu Ser Ser 345

Thr Val Asn Pro Gln Glu Gly Thr Leu Ser His Ser 360 355

- (2) INFORMATION FOR SEQ ID NO:602:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 355 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide

5

- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..355
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482517

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602: Met Gln Asp Asp Gly Asp Trp Ala Ala Ile Gly Val Lys Asp Gly Gln

Lys Leu Met Met Gly Thr Ala Asp Glu Ile Val Lys Ala Pro Glu 25

Lys Ala Ile Val Phe Ala Glu Asn Leu Pro Glu Glu Ala Leu Ala Thr 40

Asn Leu Gly Tyr Ser Ala Gly Leu Val Asn Leu Gly Asn Thr Cys Tyr 55

Met Asn Ser Thr Val Gln Cys Leu Lys Ser Val Pro Glu Leu Lys Ser 75

Ala Leu Ser Asn Tyr Ser Leu Ala Ala Arg Ser Asn Asp Val Asp Gln 9.0

Thr Ser His Met Leu Thr Val Ala Thr Arg Glu Leu Phe Gly Glu Leu 110 105 100

Asp Arg Ser Val Asn Ala Val Ser Pro Ser Gln Phe Trp Met Val Leu 125 120

Arg Lys Lys Tyr Pro Gln Phe Ser Gln Leu Gln Asn Gly Met His Met 135

Gln Gln Asp Ala Glu Glu Cys Trp Thr Gln Leu Leu Tyr Thr Leu Ser 155 150

Gln Ser Leu Lys Ala Pro Thr Ser Ser Glu Gly Ala Asp Ala Val Lys 170

Ala Leu Phe Gly Val Asn Leu Gln Ser Arg Leu His Cys Gln Glu Ser 185 Gly Glu Glu Ser Ser Glu Thr Glu Ser Val Tyr Ser Leu Lys Cys His

200 Ile Ser His Glu Val Asn His Leu His Glu Gly Leu Lys His Gly Leu 220 215

Lys Gly Glu Leu Glu Lys Thr Ser Pro Ala Leu Gly Arg Thr Ala Leu

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240
                                        235
225
Tyr Val Lys Glu Ser Leu Ile Asp Ser Leu Pro Arg Tyr Leu Thr Val
                                    250
                245
Gln Phe Val Arg Phe Phe Trp Lys Arg Glu Ser Asn Gln Lys Ala Lys
                                                    270
                                265
            260
Ile Leu Arg Lys Val Asp Tyr Pro Leu Val Leu Asp Ile Phe Asp Leu
                            280
Cys Ser Glu Asp Leu Arg Lys Lys Leu Glu Ala Pro Arg Gln Lys Leu
                        295
Arg Glu Glu Gly Lys Lys Leu Gly Leu Gln Thr Ser Ala Lys Ser
                                        315
                    310
Gly Ser Lys Asp Ser Asp Val Lys Met Thr Asp Ala Glu Ala Ser Ala
                                    330
                325
Asn Gly Ser Gly Glu Ser Ser Thr Val Asn Pro Gln Glu Gly Thr Leu
                                345
            340
Ser His Ser
        355
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- (2) INFORMATION FOR SEQ ID NO:603:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 630 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..630
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482525
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:603: aaccttcgca gctagatctg gacgcttttt actgactaga ctcctgacaa tatcttcatc 60 acaaatagca ttacattgat gagccatgca tcyaatcctt ttgctctgac cttcatttat 120 ctgcacagta aaatgctccg tccaacaatt attgcaaaag caatggccac agwccattct 180 tgtcatgtga tcacctggta aatcctccat gcaaacatca caactcatct gtgaagactg 240 aggaaaggaa gagttgccat attgataatc gaagacagtg acaccagctc cagaaaacaa 300 rctatmtttt mctttctmaa caaacacagc aaacaacttc tccacatccc actggtaatg 360 aataagaaga gtccgtgcat ggtgctcctt tattgataac aattscatca cccttagcaa 420 atcttctctc tgtgctgcta gaagcgattc ctgagtgatg acctgagttg tttgawcytt 480 tagaggacaa gaggctgcaa ttcaagactc ttcawtatca attccatcga aaagaatctt 540 gatcggagga gtaataggca agccctcttc ctccgcgcta aaataatcat ccatcgatca 600 caattctgtt tttcgattag gatgttctag
- (2) INFORMATION FOR SEQ ID NO:604:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 40 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..40
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482526
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

Met Ser His Ala Xaa Asn Pro Phe Ala Leu Thr Phe Ile Tyr Leu His 10 Ser Lys Met Leu Arg Pro Thr Ile Ile Ala Lys Ala Met Ala Thr Xaa

25 20

His Ser Cys His Val Ile Thr Trp 35

(2) INFORMATION FOR SEQ ID NO:605:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 657 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..657
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482535
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:605: attacctaga acatcctaat caaaaagtat caatggcttc cttcacctgt tcttctccat 60 cttcgatttt acctattatt gatacgagaa gtgggaattt gcgatgcaca tttcagtctc 120 aggtttcttg tgggattcag agagatgata atggacgccg tgtttggcgg aggagaacat 180 tgacgaagaa ggacgatatg ttgcgttaca aaatgcaaag agttccattt gtggaagagc 240 aagtgaggaa gataagagra gttgggaaag taatgacaat ggacatagag cagcttcttt 300 tgagggaaga caatcggttt gaatttgtca atagcgtagc agctgaagca acagagtacg 360 tggacaagaa cagagacgaa tatggaggtt ccaaaaaaagc tatctttcat gttctaagca 420 accettetaa cgatctcegc tttgaccegc ctgaggctta tgtagaagct gatccttaca 480 aacccggtcc tggctatttg ttggagtact acacttgata tattataaca aaaagtgtca 540 atgtacttta cagcttttgt tcttgtatta ccaaaaccaa atcaatgcgt ttcacagctt 600 tgttgttttc ttggccagat ttcattttat ttatttagat ttactagatg aagacgg
- (2) INFORMATION FOR SEQ ID NO:606: (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 171 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..171
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482536
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

Tyr Leu Glu His Pro Asn Gln Lys Val Ser Met Ala Ser Phe Thr Cys 10

Ser Ser Pro Ser Ser Ile Leu Pro Ile Ile Asp Thr Arg Ser Gly Asn 25

Leu Arg Cys Thr Phe Gln Ser Gln Val Ser Cys Gly Ile Gln Arg Asp 45 40

Asp Asn Gly Arg Arg Val Trp Arg Arg Thr Leu Thr Lys Lys Asp 60 55

Asp Met Leu Arg Tyr Lys Met Gln Arg Val Pro Phe Val Glu Gln 75 70

Val Arg Lys Ile Arg Xaa Val Gly Lys Val Met Thr Met Asp Ile Glu 90

Gln Leu Leu Arg Glu Asp Asn Arg Phe Glu Phe Val Asn Ser Val 110 105 100

Ala Ala Glu Ala Thr Glu Tyr Val Asp Lys Asn Arg Asp Glu Tyr Gly 125 120

Gly Ser Lys Lys Ala Ile Phe His Val Leu Ser Asn Arg Val Asn Asp 140 135

Leu Gly Phe Asp Arg Pro Glu Ala Tyr Val Glu Ala Asp Pro Tyr Lys 155 150

Pro Gly Pro Gly Tyr Leu Leu Glu Tyr Tyr Thr 170 165

- (2) INFORMATION FOR SEQ ID NO:607:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 161 amino acids

- (B) TYPE: amino acid
- (C) STRANDEDNESS:
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..161
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482537
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:
- Met Ala Ser Phe Thr Cys Ser Ser Pro Ser Ser Ile Leu Pro Ile Ile
  1 5 10 15
- Asp Thr Arg Ser Gly Asn Leu Arg Cys Thr Phe Gln Ser Gln Val Ser 20 25 30
- Cys Gly Ile Gln Arg Asp Asp Asn Gly Arg Arg Val Trp Arg Arg Arg 35 40 45
- Thr Leu Thr Lys Lys Asp Asp Met Leu Arg Tyr Lys Met Gln Arg Val
- Pro Phe Val Glu Glu Gln Val Arg Lys Ile Arg Xaa Val Gly Lys Val
- Met Thr Met Asp Ile Glu Gln Leu Leu Leu Arg Glu Asp Asn Arg Phe 85 90 95
- Glu Phe Val Asn Ser Val Ala Ala Glu Ala Thr Glu Tyr Val Asp Lys
  100 105 110
- Asn Arg Asp Glu Tyr Gly Gly Ser Lys Lys Ala Ile Phe His Val Leu
- Ser Asn Arg Val Asn Asp Leu Gly Phe Asp Arg Pro Glu Ala Tyr Val
- Glu Ala Asp Pro Tyr Lys Pro Gly Pro Gly Tyr Leu Leu Glu Tyr Tyr 145 150 155 160
- (2) INFORMATION FOR SEQ ID NO:608:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 106 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..106
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482538
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:
- Met Leu Arg Tyr Lys Met Gln Arg Val Pro Phe Val Glu Glu Gln Val
- Arg Lys Ile Arg Xaa Val Gly Lys Val Met Thr Met Asp Ile Glu Gln 20 25 30
- Leu Leu Leu Arg Glu Asp Asn Arg Phe Glu Phe Val Asn Ser Val Ala
- Ala Glu Ala Thr Glu Tyr Val Asp Lys Asn Arg Asp Glu Tyr Gly Gly
  50 60
- Ser Lys Lys Ala Ile Phe His Val Leu Ser Asn Arg Val Asn Asp Leu 65 70 75 80
- Gly Phe Asp Arg Pro Glu Ala Tyr Val Glu Ala Asp Pro Tyr Lys Pro 85 90 95
- Gly Pro Gly Tyr Leu Leu Glu Tyr Tyr Thr 100 105
- (2) INFORMATION FOR SEQ ID NO:609:
  - (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 814 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)
- (ix) FEATURE:
  - (A) NAME/KEY: -
  - (B) LOCATION: 1..814
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482542
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:609: agcaccggac cacacaatct tcccccaaat ctcgcctcca tcgcctctct ccacggaaat 60 ctcagcacac caatcatggg acttatctct ctttactttc aatattttct cactttctaa 120 tectateett etaattttat ttagatgtea ateattgtga ataggattat gageetgett 180 agttgcattg gactccaatt gggtgaattg gctaagaaat ttcgacatgg tgcgttcata 240 taattcgact gcaacctcta caaagctgga aaacatgaat gaacatacgc ctctgtggat 300 tgcacagatc tctatctgct tctttttgga tgaacggagg gagaaagacc taggcatact 360 cagtgatccc atgaattttg tgctcctagg tacatcattt ggggctcgta cagtgtagtt 420 gtgaatctca ctaagatgcc aacgagacct tccaagaaat cagttgcata cctgcttgtt 480 540 cgtgctccac ttctttgaat cagatggatt gcatgcagaa tttcagacac tatgctctcg ttgaccagtg ctaaattaag agtcagattt tgatgaggaa gtttagcaag taacttggct 600 gaaacagcat gcttttctgt tatttgattt gcttctactg ggcactggat aagattctct 660 ggctgacctc tagttttaca tagtctctct gatagcgtgt gaccgatgta gggggtaagg 720 780 gatatcagaa gttttaatgc tccaacccct aattcgtcat gaggattgtt gatgagttct atcatggcaa agcttgcgtc ggtttctttg atcg
- (2) INFORMATION FOR SEQ ID NO:610:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 52 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..52
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482543
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

Ala Pro Asp His Thr Ile Phe Pro Gln Ile Ser Pro Pro Ser Pro Leu

1 5 10 15

Ser Thr Glu Ile Ser Ala His Gln Ser Trp Asp Leu Ser Leu Phe Thr
20 25 30

The Asp Ile Phe Ser Leu Ser Asp Pro Ile Leu Leu Ile Leu Phe Arg

Phe Asn Ile Phe Ser Leu Ser Asn Pro Ile Leu Leu Ile Leu Phe Arg 35 40 45

Cys Gln Ser Leu

- (2) INFORMATION FOR SEQ ID NO:611:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 63 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..63
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482544
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:
- Met Val Arg Ser Tyr Asn Ser Thr Ala Thr Ser Thr Lys Leu Glu Asn 1 5 10 15

  Met Asn Glu His Thr Pro Leu Trp Ile Ala Gln Ile Ser Ile Cys Phe

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Attorney Docket No. 2740-1096P

Client Docket No. 80142.004 30 25 20 Phe Leu Asp Glu Arg Arg Glu Lys Asp Leu Gly Ile Leu Ser Asp Pro 40 Met Asn Phe Val Leu Leu Gly Thr Ser Phe Gly Ala Arg Thr Val 55 (2) INFORMATION FOR SEQ ID NO:612: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 47 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..47
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482545
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

Met Asn Glu His Thr Pro Leu Trp Ile Ala Gln Ile Ser Ile Cys Phe 10

Phe Leu Asp Glu Arg Arg Glu Lys Asp Leu Gly Ile Leu Ser Asp Pro 25

Met Asn Phe Val Leu Leu Gly Thr Ser Phe Gly Ala Arg Thr Val 40 35

- (2) INFORMATION FOR SEQ ID NO:613:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 1982 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: DNA (genomic)
  - (ix) FEATURE:
    - (A) NAME/KEY: -
    - (B) LOCATION: 1..1982
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482546
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:613: gatccttgtc acaaaatgtc gcgtaattct tctactgatt tcagctcaat cgctcaaatt 60 cgagtttgcg tttagaaatt gaagttgact cttctgttct tgaatctatc tccgatcggt 120 gaactatete teagtaceag gagattgate acteettega cattgetett tgaattegte 180 ctcaagggta ttaatgagct cgtagaagct accagaaatg gcgtccatga gctctggtga 240 tgaaagcett cgactttgca tgtttgattt gaggagaggt caaactgaag gacaagagtt 300 agagaaaatt tigttetitt ateetgeega titagaette tegaegeagt tateagtgat 360 cgggctcagt gaagggctta ttacttttac tagacttttc tctccggagg cggcttgtga 420 agtgatcgaa gcagaaagac attcccatgt tttctatgag gctgaacctg atatctggat 480 ggttatggtt gtggagaaaa ataaggagac aggagcgata tggaggatcg atgcattaag 540 gagggtgctt aaagaagtgc actcactctt tgtgatgttt cacgggtcaa ttagggcatt 600 aatcgaaaaa gaaccaacag gagggcttac ccgatcacta ttgtacccgt tcatcacaga 660 ttatttaagc acatttcaaa tatggtctct ctcggaagac tgctgctgtg aatttttgt 720 tgggaagaaa cttcagctac caactttccg tgaaactttg agagagcgtg gaactgttca 780 aatgettaet ttageaaggg acactgeagt tgaagtteag tetettgtte aagtaetaga 840 ttcatgtgct gggagcttac gatgtcactc tatgatctta tttcaagatc ttttggtttc 900 aacaaccctc tcagctgatg ataccgtcga cttgtttaca tttgcggtaa tgaggttgac 960 ctcaaaagct ttctcctctg atacgagttc ttggtcatat ctacgtaaag ggcctggttc 1020 atctgaaatc tcttctagat ctaatctggc acccgttggc tcaattgatt ccctacactc 1080 aagaaacggt aataacatgc atcatgttat taggccacta caaaatgata agtggacaaa 1140 agggaaagat gggtttctaa taaccgatat ttggggtctt gagactggcg gctcccctga 1200 ttctgccatc cctacaattt ggcttcagca gacacaagaa agaatgtatc tccttgccta 1260 tcagcataaa agtctcacct tacttcttct gatgcctaca aatgccattg tcaatggaga 1320 tttaagcatc tcagccgtga aacagcaagt tattgaagat gcatcactga gaattttgaa 1380 aattgaagag aatatttcaa gagggtgggg cggtgagaat gcttaccata ttaagggtta 1440

tq

| ccgttactta gtagttgata aacaacactt gcaaaggagt agaaaaaagc cgtgcaaaag caatgtgtgg gtgatcgccaaggcagca actcttcttg gtcttctag tttcaagtag cagccattaa ttttgttttg | ctctacttgc<br>gacaggagaa<br>gtgtgaccag<br>ataccacaga<br>actaagtttt<br>gaagtgaaaa<br>tgagaaattg | actaaacaag<br>agacatggaa<br>aggcaaagag<br>cgctgttgga<br>cgtgttcttt<br>gctcagaaga<br>cagagaggaa | cttagagaag<br>atatgcatca<br>ctttacatgg<br>agattcagca<br>cttctggttt<br>agtaatgagc<br>aacgattgtg | aagtggatte<br>gagctaagaa<br>ctttggagaa<br>acaggtattg<br>tgggaagagg<br>acttctctct<br>ttcttagttg | 1500<br>1560<br>1620<br>1680<br>1740<br>1800<br>1860<br>1920 |
|---|--|--|--|--|--|
|---|--|--|--|--|--|

- (2) INFORMATION FOR SEQ ID NO:614:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 515 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:
    - (A) NAME/KEY: peptide
    - (B) LOCATION: 1..515
    - (D) OTHER INFORMATION: / Ceres Seq. ID 1482547
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:614: Met Ala Ser Met Ser Ser Gly Asp Glu Ser Leu Arg Leu Cys Met Phe 10 Asp Leu Arg Arg Gly Gln Thr Glu Gly Gln Glu Leu Glu Lys Ile Leu 25 Phe Phe Tyr Pro Ala Asp Leu Asp Phe Ser Thr Gln Leu Ser Val Ile 40 Gly Leu Ser Glu Gly Leu Ile Thr Phe Thr Arg Leu Phe Ser Pro Glu 55 Ala Ala Cys Glu Val Ile Glu Ala Glu Arg His Ser His Val Phe Tyr 75 70 Glu Ala Glu Pro Asp Ile Trp Met Val Met Val Val Glu Lys Asn Lys 90 Glu Thr Gly Ala Ile Trp Arg Ile Asp Ala Leu Arg Arg Val Leu Lys 105 Glu Val His Ser Leu Phe Val Met Phe His Gly Ser Ile Arg Ala Leu 125 120 Ile Glu Lys Glu Pro Thr Gly Gly Leu Thr Arg Ser Leu Leu Tyr Pro 140 135 Phe Ile Thr Asp Tyr Leu Ser Thr Phe Gln Ile Trp Ser Leu Ser Glu 150 Asp Cys Cys Cys Glu Phe Phe Val Gly Lys Lys Leu Gln Leu Pro Thr 170 165 Phe Arg Glu Thr Leu Arg Glu Arg Gly Thr Val Gln Met Leu Thr Leu 185 180 Ala Arg Asp Thr Ala Val Glu Val Gln Ser Leu Val Gln Val Leu Asp 205 200 Ser Cys Ala Gly Ser Leu Arg Cys His Ser Met Ile Leu Phe Gln Asp 220 215 Leu Leu Val Ser Thr Thr Leu Ser Ala Asp Asp Thr Val Asp Leu Phe 235 230 Thr Phe Ala Val Met Arg Leu Thr Ser Lys Ala Phe Ser Ser Asp Thr 250 245 Ser Ser Trp Ser Tyr Leu Arg Lys Gly Pro Gly Ser Ser Glu Ile Ser 265 260 Ser Arg Ser Asn Leu Ala Pro Val Gly Ser Ile Asp Ser Leu His Ser 280 Arg Asn Gly Asn Asn Met His His Val Ile Arg Pro Leu Gln Asn Asp

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#### Attorney Docket No. Client Docket No. 80142.004

| Lys  |            | 200      |            |      |       |       | 205 |      |     |         |          | 300    |      |     |            |     |
|--|------------|----------|------------|------|-------|-------|-----|------|-----|---------|----------|--------|------|-----|------------|-----|
| Signature   Sign | <b>.</b>   | 290      | mh         | T    | C1    | T *** |     |      |     | T. 🗕 11 | Tle      |        | Asp  | Tle | Trp        | Glv |
| Leu         Glu         Thr         Gly         Gly         Ser         Pro         Asp         Ser         Ala         Ile         Pro         Thr         Ile         Trp         Leu         Asp         Ser         Asp         Ser         Ala         Ile         Pro         Thr         Ile         Trp         Leu         Asp         Met         Trp         Leu         Asp         Trp         Leu         Asp         Asp <td></td> <td>Trp</td> <td>THE</td> <td>ьуѕ</td> <td>СТА</td> <td></td> <td>АБР</td> <td>СТУ</td> <td>rne</td> <td>пси</td> <td>315</td> <td></td> <td>1101</td> <td></td> <td> F</td> <td>320</td>  |            | Trp      | THE        | ьуѕ  | СТА   |       | АБР | СТУ  | rne | пси     | 315      |        | 1101 |     | F          | 320 |
| Signature 1971 1972 1972 1972 1972 1972 1972 1972  | 3 0 3      | Clu      | Thr        | Glv  | Glv   |       | Pro | Asp  | Ser | Ala     |          | Pro    | Thr  | Ile | Trp        | Leu |
| Gln         Thr         Gln         Glu         Arg         Met         Tyr         Leu         Ala         Tyr         Gln         His         Lys         Ser           Leu         Thr         Leu         Leu         Leu         Met         Pro         Thr         Asn         Ala         Ile         Val         Asn         Glu         Asn         Ala         Ser         Ile         Asn         Ala         Ile         Asn         Ala         Ser         Ile         Asn         Asn         Ile         Glu         Asn         Ile         Glu         Asn         Ile         Asn         Asn         Ile         Asn         Asn         Asn         Ile         Asn  | Leu        | GIU      | TIIL       | Gry  |       | DCI   | 110 | 1101 |     |         |          |        |      |     | 335        |     |
| Leu Thr Leu Leu Leu Leu Leu Met Pro Thr Asn Ala Ile Val Asn Gly Asp 355  | Gln        | Gln      | Thr        | Gln  |       | Ara   | Met | Tvr  | Leu | Leu     | Ala      | Tyr    | Gln  | His | Lys        | Ser |
| Leu Ser 11e Ser Ala Val Lys Gln Gln Val Ile Glu Asp Ala Ser Leu 37o  | <b></b>    | 01       |            |      |       | ,     |     | -    | 345 |         |          | _      |      | 350 |            |     |
| Leu Ser 11e Ser Ala Val Lys Gln Gln Val Ile Glu Asp Ala Ser Leu 37o  | Leu        | Thr      | Leu        | Leu  | Leu   | Leu   | Met | Pro  | Thr | Asn     | Ala      | Ile    | Val  | Asn | Gly        | Asp |
| Arg       11e       Leu       Lys       Ile       Glu       Glu       Asn       Ile       Ser       Arg       Gly       Trp       Gly       Gly       Gly       Glu       Glu       Asn       Ile       Ser       Arg       Gly       Trp       Gly       Gly       Gly       Gly       Asn       Asp       Asn       Asp       Asn       Asp       Asn       Asp       A  |            |          | 355        |      |       |       |     | 360  |     |         |          |        | 365  |     |            |     |
| Arg         11e         Leu         Lys         11e         Glu         Glu         Asn         11e         Ser         Arg         Gly         Trp         Gly         Gly         Gly         Asn         11e         Ser         Asn         Arg         Gly         Trp         Leu         Arg         Leu         Val         Asp         Asn         Asp           Thr         Lys         Val         Ser         Arg         Ser         Pro         Ser         Gly         Lys         Val         Thr         Thr         Leu         Asp  | Leu        | Ser      | Ile        | Ser  | Ala   | Val   | Lys | Gln  | Gln | Val     | Ile      | Glu    | Asp  | Ala | Ser        | Leu |
| 385       Ala       Tyr       His       Ile       Lys       Gly       Tyr       Arg       Tyr       Leu       Val       Val       Asp       Asn       Asp         Asn       Ala       Tyr       His       Ile       Lys       Gly       Tyr       Arg       Tyr       Leu       Val       Val       Asp       A  |            | 370      |            |      |       |       | 375 |      |     |         |          | 380    |      |     |            |     |
| Asn Ala Tyr His Ile Lys Gly Tyr Arg Tyr Leu Val Val Asp Asn Asp Asp Thr Lys Val Ser Arg Ser Ser Pro Ser Gly Lys Val Thr Thr Leu Ala 430  Lys Glu Ser Leu Leu Ala Leu Asn Lys Leu Arg Glu Glu Val Asp Ser Ser Arg Ser A40   | Arg        | Ile      | Leu        | Lys  | Ile   |       | Glu | Asn  | Ile | Ser     | Arg      | Gly    | Trp  | Gly | Gly        | Glu |
| Thr Lys Val Ser Arg Ser Ser Pro Ser Gly Lys Val Thr Thr Leu Ala 430  Lys Glu Ser Leu Leu Ala Leu Ala Leu Asn Lys Leu Arg Glu Glu Val Asp Ser Gly Lys Val Thr Thr Leu Ala 430  Glu Lys Ser Arg Ala Lys Gly Gln Glu Lys Asp Met Glu Val Asp Ser Asp  | 385        |          |            |      |       |       |     |      |     |         |          |        |      | _   | _          |     |
| Thr Lys Val Ser Arg Ser Ser Pro Ser Gly Lys Val Thr Thr Leu Ala 420  | Asn        | Ala      | ${	t Tyr}$ | His  |       | Lys   | Gly | Tyr  | Arg | Tyr     | Leu      | Val    | Val  | Asp | Asn        | Asp |
| Lys Glu Ser Leu Leu Ala Leu Asn Lys Leu Arg Glu Glu Val Asp Ser 435  |            |          |            |      |       |       | _   | _    | _   |         | <b>~</b> | 17 - 7 | mb   | Шhъ |            | 71. |
| Lys Glu Ser Leu Leu Ala Leu Asn Lys Leu Arg Glu Glu Val Asp Ser 435  Glu Lys Ser Arg Ala Lys Gly Glu Glu Lys Asp Met Glu Ile Cys Ile 450  Arg Ala Lys Asn Asn Val Trp Val Ile Ala Arg Val Thr Arg Gly Lys 465  Glu Leu Tyr Met Ala Leu Glu Lys Gly Ser Asp Thr Leu Leu Asp Thr Asp Gly Lys 485  Thr Asp Ala Val Gly Arg Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe 500  Leu Met Asp   | Thr        | Lys      | Val        |      | Arg   | Ser   | Ser | Pro  | Ser | GIY     | ьуs      | vai    | THE  | 130 | ьeu        | Ата |
| Glu Lys Ser Arg Ala Lys Gly Gln Glu Lys Asp Met Glu Ile Cys Ile 450  |            |          | _          |      | _     |       | T   | 7    |     | T 013   | 7 ~~     | Clu    | Clu  |     | Asn        | Ser |
| Glu Lys Ser Arg Ala Lys Gly Gln Glu Lys Asp Met Glu Ile Cys Ile 450  Arg Ala Lys Asn Asn Val Trp Val Ile Ala Arg Val Thr Arg Gly Lys 465  Glu Leu Tyr Met Ala Leu Glu Lys Gly Ser Asp Thr Leu Leu Asp Thr 485  Thr Asp Ala Val Gly Arg Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe 500  Leu Met Asp  | Lys        | GLu      |            | Leu  | ьeu   | Ата   | Leu |      | ьуѕ | ьец     | ALG      | GIU    | 445  | Val | пор        | DCI |
| Arg       Ala       Lys       Asn       Asn       Val       Trp       Val       Ile       Ala       Arg       Val       Thr       Arg       Gly       Lys       Ago         Glu       Leu       Tyr       Met       Ala       Leu       Glu       Lys       Gly       Ser       Asp       Thr       Leu       Leu       Asp       Thr         Thr       Asp       Ala       Val       Gly       Arg       Phe       Ser       Asn       Arg       Tyr       Cys       Ser       Gly       Ala       Phe         Leu       Met       Asp       Interval       Interval </td <td><b>a</b>3</td> <td><b>T</b></td> <td></td> <td>70</td> <td>712</td> <td>Tiro</td> <td>Clu</td> <td></td> <td>Glu</td> <td>T.v.c</td> <td>Asn</td> <td>Met</td> <td></td> <td>Tle</td> <td>Cvs</td> <td>Ile</td>  | <b>a</b> 3 | <b>T</b> |            | 70   | 712   | Tiro  | Clu |      | Glu | T.v.c   | Asn      | Met    |      | Tle | Cvs        | Ile |
| Arg Ala Lys Asn Asn Val Trp Val Ile Ala Arg Val Thr Arg Gly Lys 465 Glu Leu Tyr Met Ala Leu Glu Lys Gly Ser Asp Thr Leu Leu Asp Thr 485 Thr Asp Ala Val Gly Arg Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe 500 Leu Met Asp  | GIU        |          | ser        | AIG  | нта   | пуъ   |     | GIII | GIU |         | тор      | 460    | 014  |     | <i>-1-</i> |     |
| 465  | Ara        | 4 D U    | Luc        | Δen  | Δen   | Val   |     | Val  | Tle | Ala     | Ara      |        | Thr  | Arq | Gly        | Lys |
| Glu Leu Tyr Met Ala Leu Glu Lys Gly Ser Asp Thr Leu Leu Asp Thr 485  Thr Asp Ala Val Gly Arg Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe 500  Leu Met Asp  |            | AIG      | шуз        | ASII | 11511 |       |     | , 42 |     | •       | 475      | •      |      | _   | -          | 480 |
| Thr Asp Ala Val Gly Arg Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe 500 505 510  |            | Leu      | Tvr        | Met  | Ala   |       | Glu | Lvs  | Gly | Ser     | Asp      | Thr    | Leu  | Leu | Asp        | Thr |
| 500 505 510<br>Leu Met Asp   | O.L.C.     | 204      | -1-        |      |       |       |     | _    | -   | 490     | -        |        |      |     | 495        |     |
| 500 505 510<br>Leu Met Asp   | Thr        | Asp      | Ala        | Val  | Gly   | Arq   | Phe | Ser  | Asn | Arg     | Tyr      | Cys    | Ser  | Gly | Ala        | Phe |
| _  |            | - 1      |            |      |       | _     |     |      |     |         |          |        |      | 510 |            |     |
| 515  | Leu        | Met      | Asp        |      |       |       |     |      |     |         |          |        |      |     |            |     |
|  |            |          | 515        |      |       |       |     |      |     |         |          |        |      |     |            |     |

- (2) INFORMATION FOR SEQ ID NO:615:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 512 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS:
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: peptide
  - (ix) FEATURE:

130

- (A) NAME/KEY: peptide
- (B) LOCATION: 1..512
- (D) OTHER INFORMATION: / Ceres Seq. ID 1482548

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615: Met Ser Ser Gly Asp Glu Ser Leu Arg Leu Cys Met Phe Asp Leu Arg 10 Arg Gly Gln Thr Glu Gly Gln Glu Leu Glu Lys Ile Leu Phe Phe Tyr 25 Pro Ala Asp Leu Asp Phe Ser Thr Gln Leu Ser Val Ile Gly Leu Ser 40 Glu Gly Leu Ile Thr Phe Thr Arg Leu Phe Ser Pro Glu Ala Ala Cys 55 Glu Val Ile Glu Ala Glu Arg His Ser His Val Phe Tyr Glu Ala Glu 70 Pro Asp Ile Trp Met Val Met Val Val Glu Lys Asn Lys Glu Thr Gly 85 Ala Ile Trp Arg Ile Asp Ala Leu Arg Arg Val Leu Lys Glu Val His 105 Ser Leu Phe Val Met Phe His Gly Ser Ile Arg Ala Leu Ile Glu Lys 125 120 Glu Pro Thr Gly Gly Leu Thr Arg Ser Leu Leu Tyr Pro Phe Ile Thr 140

Asp Tyr Leu Ser Thr Phe Gln Ile Trp Ser Leu Ser Glu Asp Cys Cys 155 150 Cys Glu Phe Phe Val Gly Lys Lys Leu Gln Leu Pro Thr Phe Arg Glu 170 Thr Leu Arg Glu Arg Gly Thr Val Gln Met Leu Thr Leu Ala Arg Asp 185 Thr Ala Val Glu Val Gln Ser Leu Val Gln Val Leu Asp Ser Cys Ala 205 200 Gly Ser Leu Arg Cys His Ser Met Ile Leu Phe Gln Asp Leu Leu Val 220 215 Ser Thr Thr Leu Ser Ala Asp Asp Thr Val Asp Leu Phe Thr Phe Ala 235 230 Val Met Arg Leu Thr Ser Lys Ala Phe Ser Ser Asp Thr Ser Ser Trp 250 245 Ser Tyr Leu Arg Lys Gly Pro Gly Ser Ser Glu Ile Ser Ser Arg Ser 265 260 Asn Leu Ala Pro Val Gly Ser Ile Asp Ser Leu His Ser Arg Asn Gly 280 Asn Asn Met His His Val Ile Arg Pro Leu Gln Asn Asp Lys Trp Thr 295 Lys Gly Lys Asp Gly Phe Leu Ile Thr Asp Ile Trp Gly Leu Glu Thr 315 310 Gly Gly Ser Pro Asp Ser Ala Ile Pro Thr Ile Trp Leu Gln Gln Thr 330 325 Gln Glu Arg Met Tyr Leu Leu Ala Tyr Gln His Lys Ser Leu Thr Leu 345 Leu Leu Leu Met Pro Thr Asn Ala Ile Val Asn Gly Asp Leu Ser Ile 360 Ser Ala Val Lys Gln Gln Val Ile Glu Asp Ala Ser Leu Arg Ile Leu 375 380 Lys Ile Glu Glu Asn Ile Ser Arg Gly Trp Gly Glu Asn Ala Tyr 390 395 His Ile Lys Gly Tyr Arg Tyr Leu Val Val Asp Asn Asp Thr Lys Val 410 Ser Arg Ser Ser Pro Ser Gly Lys Val Thr Thr Leu Ala Lys Glu Ser 430 425 Leu Leu Ala Leu Asn Lys Leu Arg Glu Glu Val Asp Ser Glu Lys Ser 445 440 Arg Ala Lys Gly Gln Glu Lys Asp Met Glu Ile Cys Ile Arg Ala Lys 460 455 Asn Asn Val Trp Val Ile Ala Arg Val Thr Arg Gly Lys Glu Leu Tyr 475 470 Met Ala Leu Glu Lys Gly Ser Asp Thr Leu Leu Asp Thr Thr Asp Ala 490 485 Val Gly Arq Phe Ser Asn Arg Tyr Cys Ser Gly Ala Phe Leu Met Asp

#### (2) INFORMATION FOR SEQ ID NO:616:

500

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 501 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS:
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: peptide
  - (B) LOCATION: 1..501
  - (D) OTHER INFORMATION: / Ceres Seq. ID 1482549

|     | (xi) | SEC | QUENC          | E DE     | SCRI   | PTIC | N: S | EQ I | D NC      | :616 | :   |     |     |     |            |
|-----|------|-----|----------------|----------|--------|------|------|------|-----------|------|-----|-----|-----|-----|------------|
| 1   | Phe  | Asp | Leu            | Arg<br>5 | Arg    | Gly  | Gln  | Thr  | Glu<br>10 | Gly  | Gln |     |     | 15  |            |
|     |      |     | Phe<br>20      |          |        |      |      | 25   |           |      |     |     | 30  |     |            |
|     |      | 35  | Leu            |          |        |      | 40   |      |           |      |     | 45  |     |     |            |
|     | 50   |     | Ala            |          |        | 55   |      |      |           |      | 60  |     |     |     |            |
| 65  |      |     | Ala            |          | 70     |      |      |      |           | 75   |     |     |     |     | 80         |
| Asn |      |     | Thr            | 85       |        |      |      |      | 90        |      |     |     |     | 95  |            |
|     | _    |     | Val<br>100     |          |        |      |      | 105  |           |      |     |     | 110 |     |            |
|     |      | 115 | Glu            |          |        |      | 120  |      |           |      |     | 125 |     |     |            |
|     | 130  |     | Ile            |          |        | 135  |      |      |           |      | 140 |     |     |     |            |
| 145 |      |     | Cys            |          | 150    |      |      |      |           | 155  |     |     |     |     | 160        |
|     |      |     | Arg            | 165      |        |      |      |      | 170       |      |     |     |     | 175 |            |
|     |      |     | Arg<br>180     |          |        |      |      | 185  |           |      |     |     | 190 |     |            |
|     |      | 195 | Cys            |          |        |      | 200  |      |           |      |     | 205 |     |     |            |
|     | 210  |     | Leu            |          |        | 215  |      |      |           |      | 220 |     |     |     |            |
| 225 |      |     | Phe            |          | 230    |      |      |      |           | 235  |     |     |     |     | 240        |
|     |      |     | Ser            | 245      |        |      |      |      | 250       |      |     |     |     | 255 |            |
|     |      |     | Arg<br>260     |          |        |      |      | 265  |           |      |     |     | 270 |     |            |
|     |      | 275 | Asn            |          |        |      | 280  |      |           |      |     | 285 |     |     |            |
|     | 290  |     |                |          |        | 295  |      |      |           |      | 300 |     |     |     | Ile        |
| 305 |      |     | ı Glu<br>ı Gln |          | 310    |      |      |      |           | 315  | •   |     |     |     | 320        |
|     |      |     |                | 325      | ,      |      |      |      | 330       | )    |     |     |     | 335 | Asn        |
|     |      |     | 340            | +        |        |      |      | 345  | ,         |      |     |     | 350 | )   | Ala        |
| _   |      | 355 | 5              |          |        |      | 360  | )    |           |      |     | 365 | •   |     | Gly        |
|     | 370  | )   |                |          |        | 375  | 5    |      |           |      | 380 | )   |     |     | . Asp      |
| 385 | ;    |     |                |          | 390    | )    |      |      |           | 395  | 5   |     | •   |     | 400<br>Thr |
|     |      |     |                | 405      | 5      |      |      |      | 410       | )    |     |     |     | 415 | ;<br>ı Val |
|     |      |     | 420            | )        |        |      |      | 42   | 5         |      |     |     | 43( | )   | ı Ile      |
| -   |      | 43  | 5              |          |        |      | 44(  | )    |           |      |     | 445 | 5   |     | . Arg      |
| cys | 450  |     | a ur           | י ארי    | וכנז כ | 45   |      | ,    |           |      | 46  | 0   | - " |     | ,          |



Table 2 Page 309